THE OIL WEEKLY

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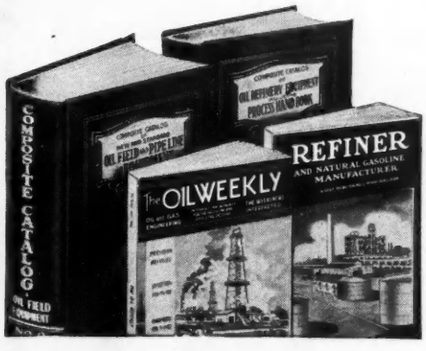

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The Oil Man's Calendar

SEPT. 29	Interstate Oil Compact Commission, Mayo Hotel, Tulsa, Oklahoma.
27 to Oct. 2	American Association of Petroleum Geologists, Mid-Year Meeting, El Paso, Texas.
OCT. 5–7	American Institute of Mining & Metallurgical Engineers, Fall Meeting, Petroleum Division, Plaza Hotel, San Antonio, Texas.
10–13	North American Gas Tax Conference, Tulsa, Oklahoma.
10–14	American Gas Association, Atlantic City, New Jersey.
10–14	National Safety Congress, Petroleum Section, Stevens Hotel, Chicago.
12–13	Indiana Independent Petroleum Association, Hotel Severin, Indianapolis, Indiana.
18	National Stripper Well Association and Oklahoma Stripper Well Association, Annual Meetings, Tulsa.
19–21	Independent Petroleum Association of America, Tulsa, Oklahoma.
20–21	American Institute of Mining & Metallurgical Engineers, Petroleum Division and Industrial Minerals Division, Los Angeles, California.
27–29	Annual Convention, Texas Division, Mid-Continent Oil & Gas Assn., San Antonio, Texas.
NOV. 3–4	American Association of Petroleum Geologists, Pacific Section, Los Angeles, California.
14–18	American Petroleum Institute, (Annual), Stevens Hotel, Chicago.
DEC.	Mid-Continent Oil & Gas Assn., Standing Tax Committees, Dallas.

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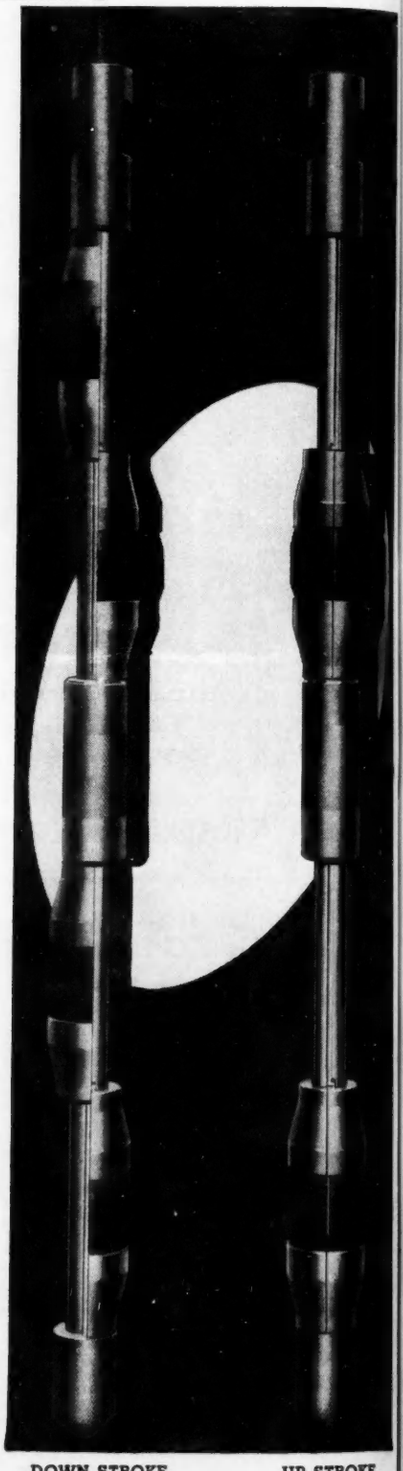

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This Week's Panorama

UNDER the strict crude production allowables that are in effect in September, the petroleum industry continues to hold down satisfactorily the output of both wells and refineries. And because of the effective balancing of new supply with demand, inventories of crude and refined oils continue in comparatively favorable relation to prevailing and prospective consumption.

Through benefit of the strict regulation of operations, the markets of the industry now are generally stable, and prices of both crude and refined oils promise to hold in coming weeks around the present levels.

Crude Production and Refinery Runs

The latest weekly report of the American Petroleum Institute reflected the sharp drop in crude oil production that resulted from the reinstatement of Saturday shut-downs of Texas fields, in addition to the long-established Sunday closings. Dropping nearly 150,000 barrels, to an average of 3,206,900 barrels daily, United States production in the week ended September 10 was 11.9 percent lower than in the corresponding week last year.

The refineries did not curtail runs in the meantime, but on the contrary increased them 40,000 barrels to an average of 3,235,000 barrels daily, and the plants consequently were using more crude during the week than the wells were turning out. The runs were, nevertheless, 6.4 percent lower than in the corresponding week last year.

Crude Stocks at 15-Year Low

Inasmuch as the refinery runs weer higher, in the face of the sharp curtailment of crude production, a substantial withdrawal of crude oil from storage was indicated for the week of September 10. However, the latest official figure of the Bureau of Mines on crude stocks was that for the week ended September 3, when inventories came down 110,000 barrels further, to 284,919,000 barrels. At that level, the crude oil stocks were 8.2 percent lower than one year previously and were at the lowest point for 15 years.

Gasoline Situation

The comparatively large refinery output also resulted in the addition of about 300,000 barrels of gasoline to storage in the week ended September 10, as the stocks rose to 70,860,000 barrels. It is customary for the industry to begin increasing gasoline stocks in September, but not this early in the month. The stocks of 70,860,000 barrels on hand September 10 were 6.6 percent larger than those of 66,456,000 barrels held at the corresponding time last year. Yet the demand for gasoline has been running lately only slightly above last year's curve. It is indicated, therefore, that further strict curbing of gasoline production would be desirable. Fortunately, comparatively small refinery output will be promoted during the remainder of September by the scheduled strict curtailment of crude production.

Nevertheless, the gasoline market is not taking too much for granted regarding the future trend of gasoline stocks. The prices of gasoline have stood their ground after having yielded somewhat just before Labor Day, but they have not been especially steady.

Fuel Oil Situation

Despite continued building up of stocks, the fuel oil markets remain steady, with prices unchanged. Although already exceptionally large, fuel oil storage was increased 1,500,000 barrels in the week ended September 10, having risen to 149,104,000 barrels. That supply was 30 percent larger than the stocks of 114,666,000 barrels held at the corresponding time last year, although fuel oil consumption has been materially lower this year than last year.

Oil Demand Still Lagging

In view of the high hopes in the past few months for an impending revival of business, the trends of oil consumption have been somewhat disappointing.

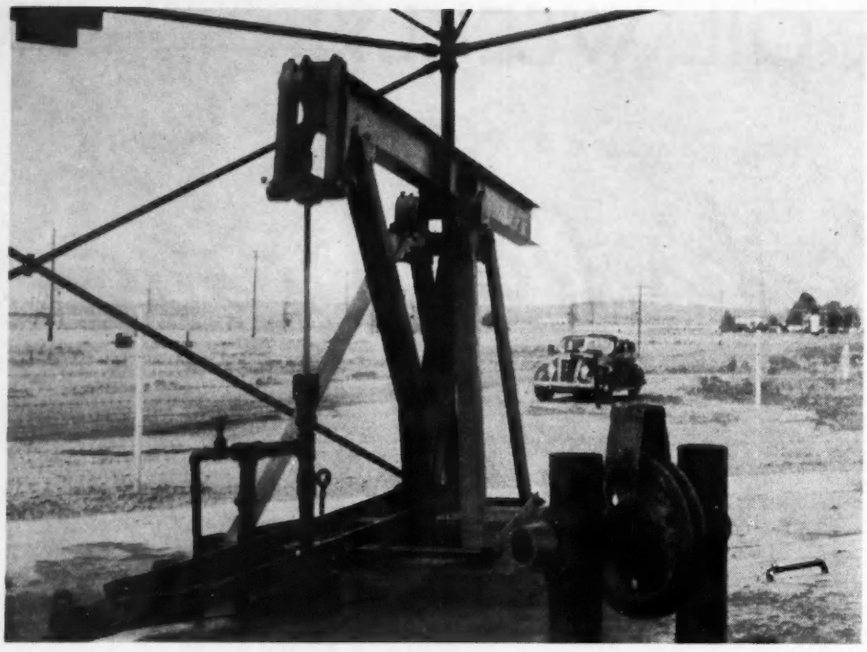
The latest official figures on consumption, embodied in the Bureau of Mines monthly report covering July, failed to show any definite upturn in oil demand. On the contrary, the demand in July, 1938, made a less favorable comparison with that one year previously than did the demand in June or May.

Export business was not as good, comparatively, as in earlier months, and domestic consumption also made a relatively poor showing.

The total demand for United States petroleum, for both domestic use and exportation, was 5.5 percent smaller in July, 1938, than in July, 1937, whereas it was off only 2.7 percent in both June and May.

Crude oil exports in July were 13.9 percent larger than a year before, and exports of refined products were 5.8 percent larger, but the foreign business had been relatively better in June and May.

Total domestic demand for petroleum was 7.8 percent smaller in July, 1938, than in July, 1937, whereas it had been off only 6 percent in June and 5.6 percent in May. These figures reflected the con-



To service wells properly in the Big Muddy field, of Wyoming, Continental Oil Company has equipped most pumping properties with permanent sheaves mounted on derrick floors. It is used with the wire line when pulling rods and tubing. In placing this sheave, two 6-inch pipes are set in the concrete floor. Near the upper ends of these two vertical pipes, slots are cut to accommodate a 2-inch horizontal pipe secured by U-bolts to prevent end play. The sheave rotates on this 2-inch cross member. Spacers are placed between the hubs of the sheave and the vertical stand pipes to control the sheave. To control spooling of wire lines, a guide is placed on the sheave that prevents the pulling line from jumping from the groove.

tinued lagging of domestic demand for gasoline, heavy fuel oils, and lubricants.

The United States consumption of gasoline was 6.4 percent lower in July, 1938, than in July, 1937, after having been off only 0.6 percent in June and 1.2 percent in May.

Domestic demand for residual fuel oils, employed in industrial production, was off in July 20.4 percent from a year previously, although it had been down only 14.5 percent in June and 14.8 percent in May.

Lubricants, however, showed some pick-up in demand as compared with earlier months, requirements in July having been only 7.1 percent under a year before, while those in June had been down 21.2 percent and those of May 16.7 percent.

On the favorable side were the figures on kerosene and light fuel oils. The domestic demand for kerosene was 4.4 percent larger in July, 1938, than in July, 1937, whereas it had been off a fraction of 1 percent in June and down 12.4 percent in May, as compared with one year previously.

The domestic demand for gas oil and distillate fuels was 19.4 percent larger in July, 1938, than in July, 1937, after having been off 12.7 percent in June and up 3.5 percent in May.

Consumption in First Seven Months

If the generally expected business recovery materializes in the remaining months of the year, oil demand likely will show some improvement. But so far, this year's record of demand has fallen below early expectations.

The total demand for United States petroleum was 1.5 percent smaller in the first seven months of 1938 than in the corresponding period of 1937, whereas it was generally expected early in the year that demand would be around 5 percent larger for 1938 than for 1937.

The decrease from last year was held as low as 1.5 percent, moreover, only through benefit of exceptionally good export business; domestic demand for all products having been down 5 percent.

Exports of crude oil were 36.2 percent larger in the first seven months of 1938 than in the similar period of 1937, and exports of refined products were up 15.8 percent.

While domestic demand for all oils was down 5 percent, heavy fuel oils and lubricants were largely responsible for the decrease, as demand held up relatively well for gasoline, kerosene, light fuel oils, and some other products. For the seven months, the domestic demand was down 14.8 percent for residual fuel oils, 16 percent for lubricants, 8.9 percent for road oil, 4.2 percent for coke, 1.7 percent for gas oil and distillate fuels, and 0.7 percent for motor fuel. On the other hand, the domestic demand was up 2.4 percent for kerosene, 2 percent for still gas, and 1.4 percent for asphalt.

Petroleum as Source of Energy

Among the world's three principal sources of industrial power, petroleum ranks second, coal being first and falling water third. Coal and petroleum are alike in that they embody stored-up energy, and they possibly are of similar origin.

In the United States, coal furnishes about 58 percent of the power used, while petroleum provides about 21 percent, water power 6 percent, natural gas 6 percent, firewood 5 percent, work animals 3 percent, and wind and all other sources less than 1 percent.

Europe has three times as much population as the United States and uses more coal and water power but not as much petroleum.

With only 6 percent of the world's population, the United States consumes a third of the coal that is produced and over 60 percent of the petroleum, while it produces more petroleum than it consumes, exports being larger than imports.

Texas Anti-Trust Suit

Attorney General McCraw of Texas has assigned seven assistants and a group of special attorneys to proceed in district court at Austin October 3 with the anti-trust suit against 15 oil companies and 2 associations, which has been in the Texas courts for seven years, after having been filed by Governor James V. Allred when he was attorney general. The state alleged that the defendants conspired to fix gasoline prices in Texas.

Drilling Vigorous This Year Despite Slowing Down

By L. J. LOGAN, Associate Editor

DESPITE the temporary loss of confidence and slowing down of activity last spring, United States drilling subsequently has proceeded at a comparatively vigorous pace, and it likely will continue aggressive during the remainder of the year.

Although probably 15 percent fewer wells will be completed in 1938 than in 1937, this year's record nevertheless promises to be one of the more impressive ones in the history of the industry.

In drilling during 1937 about 33,000 wells, the industry approximately duplicated the activity of 1920, which was the greatest on record.

In 1938, according to present indications, there will probably be around 28,000 well completions, or about 15 percent fewer than in 1937.

This Year Active

Such a record would be exceptional, despite the decrease from 1937. It would be slightly in excess of that for 1936, when about 27,000 wells were completed, and would rank fourth in the history of the industry, rating after the records for 1920, 1937, and 1926, the three most active years.

For several months the field activity has been closely following the seasonal pattern of 1936, and it promises to continue around or above the 1936 trend. But in the first four months of the year, the record for 1938 was better than that for 1936, as drilling was still working higher in early 1936, while it already was on a high plane in early 1938.

Business Situation Promising

Both the general business situation and conditions in the petroleum industry itself support the assumption that the trend established in the past several months, similar to that of 1936, will be extended through the remaining months of this year.

Numerous business indicators hold out the promise of general improvement in the fall and winter, as for instance the current rise of the Federal Reserve Board's index of industrial production.

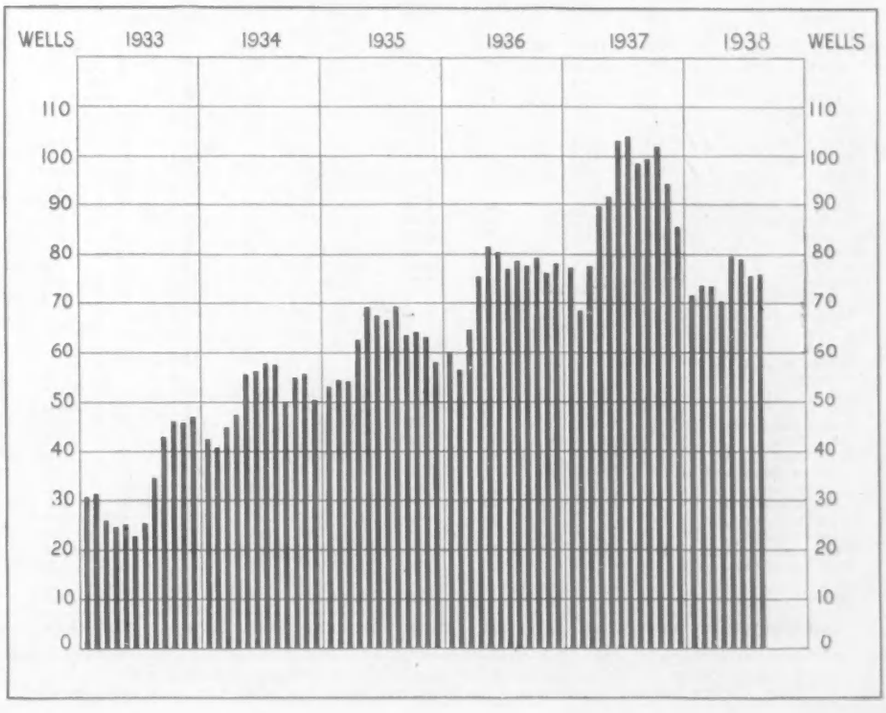
Within the petroleum industry, recent months have brought much improvement of conditions. Surplus inventories of gasoline have been largely liquidated, and crude oil stocks have been brought down to the lowest levels for 15 years, or since 1923. The reductions of surplus stocks have been accomplished through drastic curtailment of crude oil production and through moderate operations at the refineries. And in view of these successful results, the industry's markets have held generally steady, although crude prices recently were reduced locally in East Texas and in the Pennsylvania grade fields, because of conditions in those areas. In general, the crude prices promise to hold at present levels the rest of the year; and following some recent slight marking down of gasoline prices, the markets for refined products also appear stable.

In view of these fairly good prices now prevailing, a substantial incentive for drilling remains, and it is to be expected that the field work will proceed along the established trends.

August Record

In August, 1938, well completions in the United States averaged 76 daily. That compared with an average of 98.4 wells daily com-

Average Number of Wells Completed Daily in U. S.
(By Months, January, 1933 — August, 1938)



pleted in August, 1937, and with 78.5 daily in August, 1936.

An accompanying table shows how extensive drilling has been in August in each of the past six years, or back through 1933.

August of:	Average Number of Wells Completed Daily
1933	34.8
1934	57.5
1935	69.3
1936	78.5
1937	98.4
1938	76.0

The August, 1938, drilling was about the same as in 1936 and greater than in each of the several years prior to 1936, although it was about 23 percent lower than in August, 1937, when activity was around the highest point in the history of the industry.

First 8 Months

Wells completed in the United States in the first 8 months of 1938 totaled 18,478, or 15.1 percent fewer than the 21,766 finished in the similar period of 1937.

Several important districts, nevertheless, have had more drilling this year than last year. The most noteworthy increase over last year has been that in Illinois, where 879 wells were completed in the first 8 months of this year, compared with 113 in the similar period last year. The Illinois development also has spread into Kentucky where completions have been twice as numerous this year as last year.

From a percentage standpoint, the largest increase in drilling outside Illinois has been that in Arkansas, where completions this year have more than doubled those last year.

Louisiana also has had more drilling this year than last year, as development has been more extensive in both the northern and southern sections of the state. The state as a whole showed 18 percent more completions this year than last year in the first 8 months. North Louisiana's drilling was up 26 percent, and that of South Louisiana was up 12 percent.

Two districts of Texas also have had more drilling this year. The Texas Gulf Coast is only slightly ahead of its record for last year, but North Texas shows a 9 percent increase, in consequence of the development under way in the rejuvenated K-M-A field.

Some Areas Less Active

States and districts other than those mentioned above have had less drilling this year than last year.

Because of repeated reductions of prices for Pennsylvania grade crude within the past year, drilling has declined materially in New York, Pennsylvania, West Virginia, and Ohio.

Michigan drilling is running lower this year than last year, but only to the extent of 5 percent.

In the Mid-Continent, conspicuous declines in drilling have occurred in Oklahoma and Kansas. Both Oklahoma and Kansas have had about one-third less drilling this year than last year.

New Mexico also has had nearly that large a decrease.

The sharpest declines in Texas have been those of 51 percent in Eastern Texas outside the East Texas field and of 34 percent in the Laredo area of South Texas.

The Rocky Mountain States all have had substantially less drilling this year than last year, and California has had 8 percent less.

Rigs in Operation

Rigs in Operation in the United States increased 3.5 percent during August, rising from 3737 on August 1 to 3869 on September 1. These figures indicate that there may be some increase of drilling activity in September, which would

Drilling Continues at About Same Level as in 1936

STATE OR DISTRICT	†AUGUST, 1938, COMPLETIONS AND CRUDE OIL PRODUCTION						COMPLETIONS AND PRODUCTION IN FIRST EIGHT MONTHS, 1938 AND 1937									
							WELLS COMPLETED			DETAILS OF 1938 DRILLING				BARRELS PRODUCTION		
	Total Wells	Oil	Gas	Dry	Initial Production	Production for August	1938: 8 Mo.	1937: 8 Mo.	Percent Change	Oil	Gas	Dry	Initial Production	1938: 8 Months	1937: 8 Months	Percent Change
Arkansas	20	16	....	4	9,028	1,738,550	146	69	+111	121	1	24	104,078	11,934,550	6,855,150	+74
California	141	115	1	25	94,226	20,707,100	920	1,005	— 8	734	8	178	719,865	169,495,200	153,106,500	+11
Colorado	....	....	....	....	....	114,600	5	8	.....	2	.....	3	510	958,850	1,036,700	— 7
*Eastern States	710	472	96	142	51,284	4,824,400	4,482	4,957	— 9	3,017	733	732	199,653	34,726,400	28,705,550	+21
Illinois	254	192	3	59	40,068	.....	879	113	+678	658	8	213	167,778	.....	.....	....
Indiana	9	1	....	8	100	.....	78	84	— 7	18	18	42	741	.....	.....	....
Kentucky	90	54	14	22	9,698	.....	488	237	.....	252	93	143	21,205	.....	.....	....
*New York	45	43	1	1	118	.....	479	827	— 42	439	30	10	871	.....	.....	....
Ohio	99	32	36	31	941	.....	612	986	— 38	179	241	192	3,855	.....	.....	....
*Pennsylvania	154	137	6	11	246	.....	1,501	2,110	— 29	1,385	68	48	4,423	.....	.....	....
West Virginia	59	13	36	10	113	.....	445	600	— 26	86	275	84	780	.....	.....	....
Kansas	141	95	4	42	105,083	5,045,850	1,126	1,732	— 35	769	48	309	873,535	39,951,550	46,061,800	—13
Louisiana	103	61	9	33	23,124	8,126,750	722	609	+ 18	490	41	191	241,219	63,046,350	60,936,850	+ 3
North Louisiana	52	33	8	11	12,002	2,483,100	360	286	+ 26	279	30	51	147,438	19,292,250	19,097,900	+ 1
South Louisiana	51	28	1	22	11,122	5,643,650	362	323	+ 12	211	11	140	93,781	43,754,100	41,838,950	+ 4
Michigan	103	53	1	49	14,825	1,544,450	572	604	— 5	341	14	217	69,065	12,653,600	9,683,750	+31
Montana	10	8	2	....	492	407,500	42	124	— 66	30	6	6	7,113	3,259,850	4,013,650	—19
New Mexico	58	47	3	8	20,817	3,312,800	343	473	— 27	296	10	37	168,441	24,935,450	25,915,550	— 4
Oklahoma	197	105	19	73	27,733	13,507,350	1,447	2,111	— 31	906	103	438	193,675	116,402,500	153,231,800	—24
Southeastern States	....	....	....	....	.....	.....	16	12	+ 33	1	4	11	240	.....	.....	....
Alabama	....	....	....	....	.....	.....	1	1	.....	.....	.....	1	.....	.....	.....	....
Florida	....	....	....	....	.....	.....	.....	1	.....	.....	.....	1	.....	.....	.....	....
Georgia	....	....	....	....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	....
Mississippi	....	....	....	....	.....	.....	12	10	+ 20	.....	3	9	.....	.....	.....	....
Tennessee	....	....	....	....	.....	.....	2	.....	.....	1	1	.....	240	.....	.....	....
Texas	1,165	881	28	256	1,024,667	43,130,550	8,592	9,990	.....	6,517	245	1,830	9,891,214	317,426,400	337,691,950	— 6
East Texas Field	144	140	....	4	585,191	13,664,700	1,419	1,505	— 6	1,385	.....	34	6,968,195	103,048,350	111,758,350	— 8
Rest of East Texas	42	27	1	14	25,364	3,031,900	346	710	— 51	218	20	108	122,137	23,125,950	28,650,800	—19
North Texas	292	224	2	66	116,414	2,331,350	1,754	1,612	+ 9	1,237	14	503	634,240	17,611,200	17,141,000	+ 3
South Texas	272	182	9	81	85,404	7,360,650	1,838	2,458	— 25	1,158	92	588	477,480	54,619,950	55,507,050	— 1
Corpus Christi Area	129	95	5	29	72,618	.....	824	994	— 17	563	47	214	372,372	.....	.....	....
Laredo Area	92	61	4	27	11,420	.....	696	1,058	— 34	430	39	227	89,667	.....	.....	....
San Antonio Area	51	26	....	25	1,366	.....	318	406	— 22	165	6	147	15,441	.....	.....	....
Texas Gulf Coast	152	117	3	32	48,661	6,760,850	1,026	1,020	+ 0.6	800	28	198	337,358	48,497,500	48,950,300	— 0.9
Texas Panhandle	43	32	10	1	13,396	2,262,700	405	490	— 17	321	64	20	142,204	16,216,300	18,718,150	—13
West Texas	195	153	1	41	149,815	6,807,750	1,579	1,906	— 17	1,323	12	244	1,198,517	47,320,750	48,940,900	— 3
West Central Texas	25	6	2	17	422	909,950	225	289	— 22	75	15	135	11,083	6,985,950	8,025,400	—13
Utah	....	....	....	....	.....	.....	2	.....	.....	.....	1	1	.....	.....	.....	....
Wyoming	11	7	4	....	1,707	1,831,300	63	72	— 12	36	12	15	19,574	12,727,600	12,734,850	—0.05
Total United States	2,659	1,860	167	632	1,372,986	104,291,200	18,478	21,766	— 15.1	13,260	1,226	3,992	12,488,182	807,518,350	839,974,100	— 3.9

† August completions cover not the calendar month, but the five weeks or 35 days, ended August 27.
* Figures for New York and Pennsylvania prior to June revised; completions include water-intake and pressure wells.

be contra-seasonal. For in most years recently, average daily completions have declined a little in September, following the passing of the peak of gasoline consumption and the advent of less favorable weather.

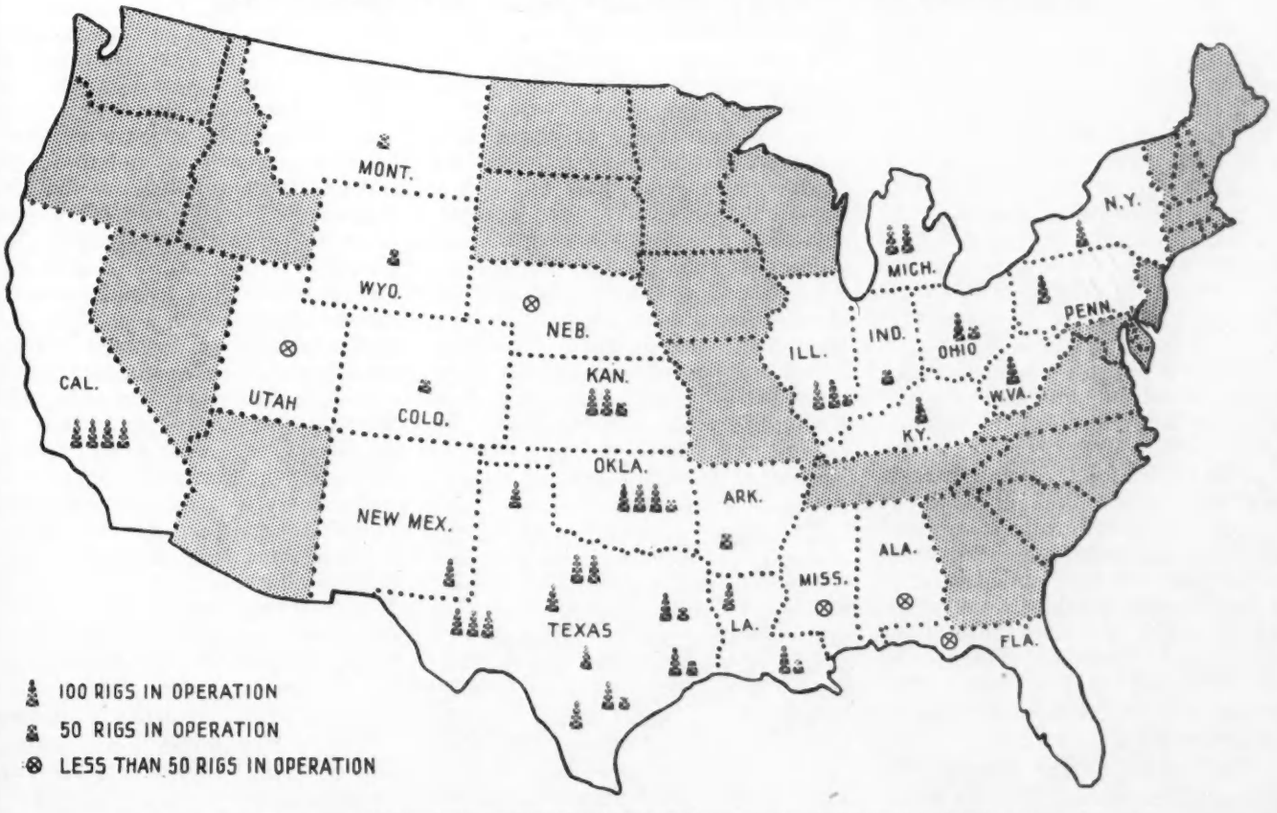
These figures on rigs in operation include wells drilling, rigging up, or temporarily shut down. Details of activity, by states and districts, appear in an accompanying table. States and districts that became more active in August were clearly in the majority, and decreases that occurred were generally small. A noteworthy exception, however, was the decline of 28 percent in North Texas, as active rigs decreased from 253 to 183, having continued the decline that began in August. Responsible for the decrease of development in North Texas was the further curtailment of work at K-M-A, because of difficulties in marketing the production of the field. Whereas the area had 123 active tests one month previously, it had only 85 on September 1, including 10 tests with surface pipe set, 24 drilling between casing points, 41 in process of completion or down to the final casing point in the Strawn pay, 5 rigging up, and 5 shut down.

Drilling Becomes More Active During August

STATE OR DISTRICT	TOTAL RIGS IN OPERATION (Drilling, Rigs Up, Shut Down)					DETAILS OF SEPTEMBER 1, 1938, ACTIVITY					
						Rigs in Operation			Prelim. Activity		
	June 1, 1938	July 1, 1938	Aug. 1, 1938	Sept. 1, 1938	Percent Change of Aug. 1 from Sept. 1	Drilling	Rigs Up	Shutdown	Derricks	Location	Total Operations
Arkansas	46	53	45	52	— 7	33	7	13	12	11	75
California	322	302	367	381	+ 4	266	71	44	20	31	432
Colorado	11	38	22	25	+14	13	4	8	...	2	27
*Eastern States	686	787	809	845	+ 4	492	126	227	61	74	980
Illinois	178	209	237	255	+ 7	99	39	117	22	30	307
New Fields	111	136	174	190	+ 9	84	31	75	17	22	229
Rest of Illinois	64	73	63	65	+ 3	15	8	42	5	8	78
Indiana	27	36	30	34	+13	23	2	9	1	8	43
Kentucky	62	70	76	77	+ 1	47	11	19	14	20	111
*New York	50	90	90	90	.....	35	30	25	.....	.....	90
Ohio	140	148	148	150	+ 1	97	24	29	9	8	167
*Pennsylvania	132	126	120	128	+ 7	117	4	7	1	2	131
West Virginia	100	108	108	111	+ 3	74	16	21	14	6	131
Kansas	187	204	208	240	+15	189	28	23	31	32	303
Louisiana	237	210	242	239	— 1	196	22	21	16	55	310
North Louisiana	114	91	100	103	+ 3	78	11	14	10	34	147
South Louisiana	123	119	142	136	— 4	118	11	7	6	21	163
Michigan	169	194	185	186	— 0.5	140	19	27	12	20	218
Montana	21	41	43	49	+14	31	1	17	...	1	50
Nebraska	1	4	3	3	.....	2	1	...	...	1	4
New Mexico	112	117	123	120	— 2	95	4	21	6	7	133
Oklahoma	315	349	262	349	+33	235	35	79	38	36	423
Southeastern States	22	21	20	23	+15	3	3	17	3	4	30
Alabama	3	4	3	5	+67	.....	2	3	...	...	5
Florida	4	4	4	5	+25	1	...	4	1	1	7
Georgia	.....	.....	.....	.....	.....	.....	...	...	...	...	.....
Mississippi	15	13	13	13	.....	2	1	10	2	3	18
Texas	1,465	1,448	1,353	1,300	— 4	996	88	216	97	321	1,718
East Texas Field	73	64	52	51	— 2	36	7	8	6	5	62
East Texas Border Counties	34	31	25	33	+32	14	14	5	2	13	48
Rest of East Texas	51	47	43	47	+ 9	27	6	14	8	7	62
North Texas	267	304	253	183	—28	148	8	27	11	68	262
South Texas	333	329	318	339	+ 7	266	25	48	24	88	451
Corpus Christi Area	167	163	155	165	+ 6	136	11	18	13	45	223
Laredo Area	81	77	87	91	+ 4	72	8	11	5	22	118
San Antonio Area	85	89	76	83	+ 9	58	6	19	6	21	110
Texas Gulf Coast	160	157	136	150	+10	136	10	4	23	55	228
Texas Panhandle	120	107	108	103	— 5	76	11	16	8	10	121
West Texas	340	326	333	308	— 7	246	4	58	14	63	385
West Central Texas	87	83	85	86	+ 1	47	3	36	1	12	99
Utah	1	6	3	3	.....	3	...	...	...	...	3
Wyoming	27	56	52	54	+ 4	31	6	17	...	4	58
Total United States	3,622	3,830	3,737	3,869	+ 3.5	2,725	415	729	296	599	4,764

* Data for New York and Pennsylvania prior to July 1 revised.

Rigs in Operation in United States Continue to Increase



Alcohol Blend Poor Substitute for Motor Fuel

By GEORGE REID, Staff Writer

Would many consumers pay the necessarily higher cost for this inferior motor fuel ?

POWER alcohol is being manufactured at Atchison, Kansas, for use in the blending of alcohol-gasoline motor fuel, with production of "Agrol," the blending fluid, reaching 75,000 gallons in April of this year. This plant, which is operated by the Atchison Agrol Company, became the property of the National Farm Chemurgic Council last December and the council was originally sponsored by the Chemical Foundation insofar as the manufacture of power alcohol was concerned. The Chemical Foundation appropriated $500,000 to the cause following instigation of the power alcohol procedure at the first meeting of the Chemurgic Council in Dearborn, Michigan, in 1935. At the fourth meeting of the Chemurgists in Omaha, Nebraska, late in April of this year the Chemical Foundation withdrew financial support following termination of the foundation's chief source of income because of expiration of certain patents which the foundation holds. Thus the National Farm Chemurgic Council now finds itself with one Agrol plant in operation, but with sufficient funds on hand for the establishment of additional plants, provided those plants can be made profitable through the sale of Agrol fluid to motor fuel marketers in the territories adjacent to the distillery.

This condition has thrown the "alky-gas" movement into the unfamiliar hands of chambers of commerce, who in turn must depend upon local loyalty in order that an alcohol plant may be secured for the locality and in order that it may then be supported after operations begin. This sort of a community cooperative endeavor has not usually been successful and becomes especially hazardous where the price of the products must of necessity be higher than general regular grade prices. Be that as it may, alky-gas boosters, chiefly via the chamber of commerce route, have grasped the reins and are giving much effort directed toward the erection of Agrol plants in such municipalities as Sioux City and Cedar Rapids, Iowa, Pine Bluff, Arkansas, and other communities. Apparently the movement has reached the stage where another year will tell the story. Alky-gas will have had its test in the middle-west from the standpoint of economics and efficiency, and its success or failure should be assured within a short time.

The council which supports the plants is not well-off financially, and it has been resorting to sale of memberships to individuals and companies and depending upon contributions to keep itself in liquid shape. The money it has on hand must be used to erect Agrol plants, which must be assured a quantity outlet for its alcohols, and these must be consumed by loyal citizens and farmers, who in turn must be convinced that Agrol motor fuel is more efficient and worth more money than the regular and premium grades of motor fuels marketed by the oil companies.

The controversy as to efficiency and applicability of alcohol-gasoline blends as compared to petroleum refinery motor fuels has raged in this country for some time. Both the proponents of alky-gas and of petroleum motor fuels have made erroneous statements, all of which have tended to confuse the issue and to further confuse the automobile owner. Several foreign countries force the use of alcohol in motor fuels by legislation and in turn, for the most part automobile engines in such countries are designed to use such fuels. On the other hand, if alcohol is desirable as a motor fuel constituent, the petroleum refining industry can make it for that purpose and produce it just as cheaply as alcohol is produced from any other source. Refineries in this country are now producing about 10,000,000 gallons of ethyl alcohol annually at a price competitive with other production methods. All of the 110,000,000 gallons of ethyl alcohol required yearly in the United States could readily be produced from cracked gases at a price level lower than that of the fermentation process.

The confusing claims and counterclaims with regard to alky-gas brought about a condition where it

became necessary for an authoritative investigation to be made. Accordingly, the Committee on Motor Fuels, American Petroleum Institute, conducted such an investigation and recently issued a highly informative brochure titled "Technical Characterictics of Alcohol-Gasoline Blends, Motor Fuel Facts Series, Number 1," which is a carefully considered authoritative discussion of the various technical characteristics of such blends, based on extensive study and research by qualified experts. It presents the joint conclusions of many competent minds. The data considered were obtained by automotive engineers under carefully controlled test conditions, as contrasted to the uncontrolled "consumer tests" on which many extravagant technical claims for blends have been based.

Higher Costs

The committee report points out that admittedly alcohol costs about five times as much at the distillery as gasoline costs at the refinery. Added costs, according to the advocates, are offset by superiority of the blend compared to ordinary gasoline. The purpose of the Committee on Motor Fuels report is to compare the properties of alcohol-gasoline blends with those of gasoline so that the average motorist may understand the relative merits of the two fuels.

Reduced Mileage

Proponents of the alky-gas blends claim more miles per gallon, less knock, better acceleration, less carbon monoxide in exhaust gases, increased power due to super-charging effect, more uniform distribution of fuel in multi-cylinder engines, easier starting, lower maintenance costs through elimination of gum and carbon deposition and lower flame temperature, and freedom from danger of water accumulating in the fuel tank and carburetor.

Mileage secured per gallon of fuel depends upon a variety of factors. These include personal driving habits, speed, city or country driving, number of engine starts per 100 miles of travel, the load carried, type of road, the air temperature and other factors. Likewise, other factors such as carburetor setting, spark timing, and so forth, all influence the miles per gallon secured from a fuel. Theoretical or maximum potential differences in mileage between gasoline and blends containing 10 percent alcohol are five percent less. Alcohol contains approximately only 65 percent as much energy per gallon as does gasoline. Hence the conclusion must be that when an alcohol-gasoline blend is used in an engine the automobile will not go as far on each gallon as would the same car on one gallon of gasoline, when the conditions and standards of performance are identical. This is confirmed by engine laboratory tests.

"Performance and mileage are interrelated," the committee report states. "Maximum performance requires a rich mixture, that is, somewhat more fuel than can be burned completely by the air supply. But maximum economy requires a lean mixture. Engines are usually adjusted for maximum performance on gasoline, despite some sacrifice of mileage. On substituting an alcohol blend, which does not require so much air, some performance or acceleration is lost, and in some cases there is a tendency for mileage to improve because of the leaner mixture. Actually, use of blends may result in about the same, less, or even better mileage than on gasoline, depending on the original engine adjustment for gasoline. But if the engine is adjusted to give the same *performance* on the blend as was obtained from gasoline, we get back to the fundamental fact that work done is proportional to energy content, and under normal conditions the mileage will be poorer on the blend."

Good Anti-Knock

Alcohol is a good anti-knock fuel. Alcohol-gasoline blends should have less knock tendency than gasoline from which the blends are made. Benzol-gasoline blends have the same decreasing tendency to knock, and such substances as tetraethyl lead, when added in very small quantities, produce the same effect. Thus there are several ways to reduce knock tendency, and the use of alcohol for this purpose is justified only when it wins out in competition with other substances that do the job just as well. Actually 2/100 percent (.02%) of tetraethyl lead will give about the same improvement as 10 percent alcohol, at a cost per gallon of 1/5 cent as compared to at least 2 cents. Competitively, therefore, alcohol is much more expensive than other anti-knock agents already perfected.

Slower Acceleration

The committee report points out that acceleration is dependent on the power output of the engine, hence acceleration and mileage are interrelated and are usually affected oppositely by carburetor adjustment or by use of fuels of different energy content. On this basis, switching a car to blended fuel should decrease its acceleration. Actual road tests bear out this conclusion, but it is found that if air temperatures are high and the engine is hot, extra heat is available to evaporate or boil the alcohol, and either gasoline or alcohol-gasoline blend, under these conditions, would completely vaporize. The blend, absorbing more heat in its evaporation, would give a somewhat cooler, and therefore more dense, air-fuel charge to the engine. Under these conditions more mixture would be taken in per stroke, and tests show that under such favorable conditions, the increase in acceleration with a 10 percent blend would be less than 2 percent. This will, of course, be at the expense of increased fuel consumption, hence less mileage. Thus, the blends might give slightly better acceleration in hot summer weather, or when an especially designed intake manifold is provided, but would perform poorly in cool or cold weather.

With regard to the claim for less production of carbon monoxide (a highly poisonous gas) in the exhaust, the committee reports that it is true that carbon monoxide is slightly reduced when a blend is substituted for gasoline without any engine adjustment, although this reduction would probably be less than the variation between cars, due to differences in carburetor adjustment and engine condition. The report emphatically states: "But any amount of carbon monoxide is dangerous in close places, and it can never be eliminated by switching to blends, except with engine adjustments which would be so unsatisfactory from a performance standpoint that they never would be retained. Under comparable conditions the two fuels will produce about the same amount of carbon monoxide. This has been proved by careful experiments. Any manipulation of data which leads motorists to believe that carbon monoxide hazards would be eliminated or sensibly reduced by blends is little less than criminal because it might encourage carelessness that would result in death."

The so-called "supercharging" is apparently a misnomer, or at best is misleading. The effect can only be produced by some form of pump or blower. Alcohol addition does not secure it. However, as previously mentioned, alcohol requires additional heat for evaporation, and the evaporation of the alcohol in the blend will cool the rest of the air-fuel mixture. The report of the committee points out that the lower the temperature the more dense will the charge be, and the greater the amount of fuel that can be taken into the cylin-

der. As previously stated in discussing acceleration, it is thus possible to get a slight increase in power (less than two percent, using a blend of 10 percent alcohol in gasoline) at the expense of greater fuel consumption. It is evident that alcohol blends do offer a slight advantage in this respect, although not to the degree usually suggested by the proponents of the blends. Also, this is not an independent advantage, but, if obtained at all, is at the expense of mileage.

The matter of fuel distribution and the efficiency with which it is secured depend entirely upon the design of the intake manifold and carburetor. Neither gasoline nor the blend will vaporize completely in the carburetor and good distribution can be obtained only by the use of a carefully designed intake manifold and carburetor. The results of many experiments with automobile engines prove this conclusion and show no difference between blends and gasoline in a given engine.

Poorer Starting

As to starting the motor, the committee reports that because alcohol is less volatile than the light fractions of ordinary gasoline, and on account of its cooling effect on evaporation, blends should not have as good starting quality as gasoline, especially at temperatures of zero and lower. Foreign difficulties with blends made with low grade gasoline confirm this. Further, the starting problem and the "vapor lock" problem are closely connected. Vapor lock results from vaporization or boiling in the fuel lines when the engine is hot, which prevents flow of fuel to the engine. Unbiased technical opinion, based upon actual tests, is that an alcohol blend having the same starting characteristics as gasoline will have more tendency to vapor lock.

The carbon deposits in an engine come primarily from lubricating oil which enters the cylinders and also from dust particles which enter with the air. A solvent, states the committee report, which could be added with the fuel to remove deposits as fast as they form would be the "answer to the automotive engineer's prayer." Exhaustive research has failed to find satisfactory solvents. Alcohol, which burns as readily as the rest of the fuel charge, can not have much action. But substitution of blends for gasoline without carburetor adjustments tends to give a "lean mixture," since blends require less air. Lean mixtures tend to burn off carbon or to diminish its formation, which accounts for any results claimed for blends. But lean mixtures mean decreased acceleration and performance. Thus again, a claimed advantage is gained only at the loss of other advantages claimed for the blends.

Gum deposits from gasoline are no longer a serious problem since by modern refinery methods gasoline is stabilized so as to eliminate largely the danger of gum formation. Alcohol is a good gum solvent, but since the problem is almost non-existant this fact is unimportant.

The flame or explosion temperature may be slightly lower when blends are used, but not sufficiently low to reduce materially attack on valves by exhaust gases or to reduce the cost of engine maintenance.

"Alcohol mixes with water very readily," the committee reports. "Therefore it is true that any water in the fuel system would be taken up by the alcohol in the blend. This is claimed as an advantage since "otherwise the water might freeze up and block the system with ice." The facts are that 10 gallons of water-free 10 percent blend at 30°F. will take up without separation between 70 and 125 cc. of water, depending on the gasoline used. In other words, the total water capacity of these 10 gallons is between 10 and 26 teaspoonfuls. In a tank with gasoline this amount of water would almost certainly freeze harmlessly in the bottom of the tank. But with the blend, after it has taken up this water, if the temperature drops to say 15°F., about a half gallon of a mixture of alcohol and water, containing a little gasoline, will separate from the gasoline and sink to the bottom of the tank. It will be almost impossible to start the engine or to make it run satisfactorily as long as this separate layer of alcohol and water remains in the bottom of the tank. In other words, an improbable difficulty has been avoided, and a very real and serious one incurred. "This problem of alcohol separation when a blend comes in contact with water is a serious one theoretically, and has proved to be a substantial difficult one in practices in countries where the use of blends has been compulsory for a number of years. Its importance is recognized in the numerous precautions taken to make and keep power alcohol free of water."

The Motor Fuel Committee report summarizes its findings as follows: "A comparison of the properties of the blends with those of the gasoline from which the blends are made reveals that the blends will show:

Conclusions

"Summing up, alcohol-gasoline mixtures are not superior motor fuels for ordinary use. They are in most respects somewhat inferior to straight gasoline. Considered objectively, on the basis of their actual merit, they are certainly not worth a higher price than would be paid for gasoline at comparable octane rating, although their cost must be higher."

Gasoline vs. Alcohol Blends

The Motor Fuel Committee report summarizes its findings as follows: "A comparison of the properties of the blends with those of the gasoline from which the blends are made reveals that the blends will show:

—Without engine adjustments, little change in mileage but diminished performance.

—After engine adjustment, similar performance but definitely reduced mileage.

—A very slight increase in maximum power output but at the cost of considerably increased fuel consumption.

—Less tendency to engine knock, at greater cost than with other anti-knock agents.

—About the same starting quality but more danger of vapor lock—no important differences in engine maintenance costs.

—No change in the hazard from carbon monoxide in exhaust gases.

—Substantial possibility of trouble from separation in tanks and carburetors by water.

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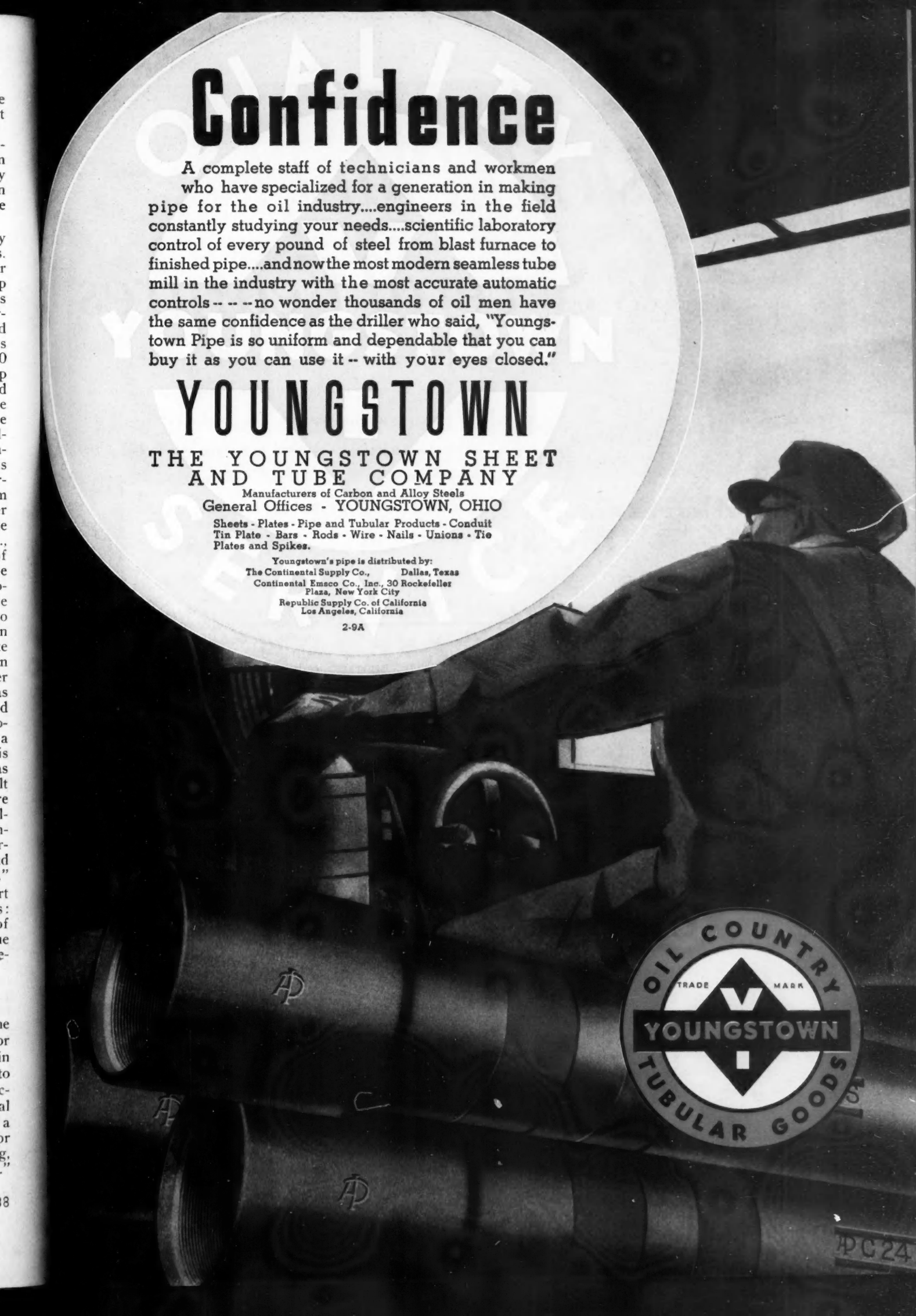

NEW EAST TEXAS

Gas Lift Plant Has Several Features

Gas is recycled over and over . . . High gas/oil ratios are reduced by eliminating sharp piping bends

By R. C. SMART, Vice President,
Ellis Petroleum Company

A CENTRAL gas-lift plant differing in several respects from the customary East Texas installation has been constructed recently. In this plant, a novel feature is the recycling over and over again of the gas used to lift the oil from the various wells without drawing on the residue lines. Another interesting development has been the reduction of high gas/oil ratios through the streamlining of pipe arrangements.

In August, 1937, Ellis Petro-

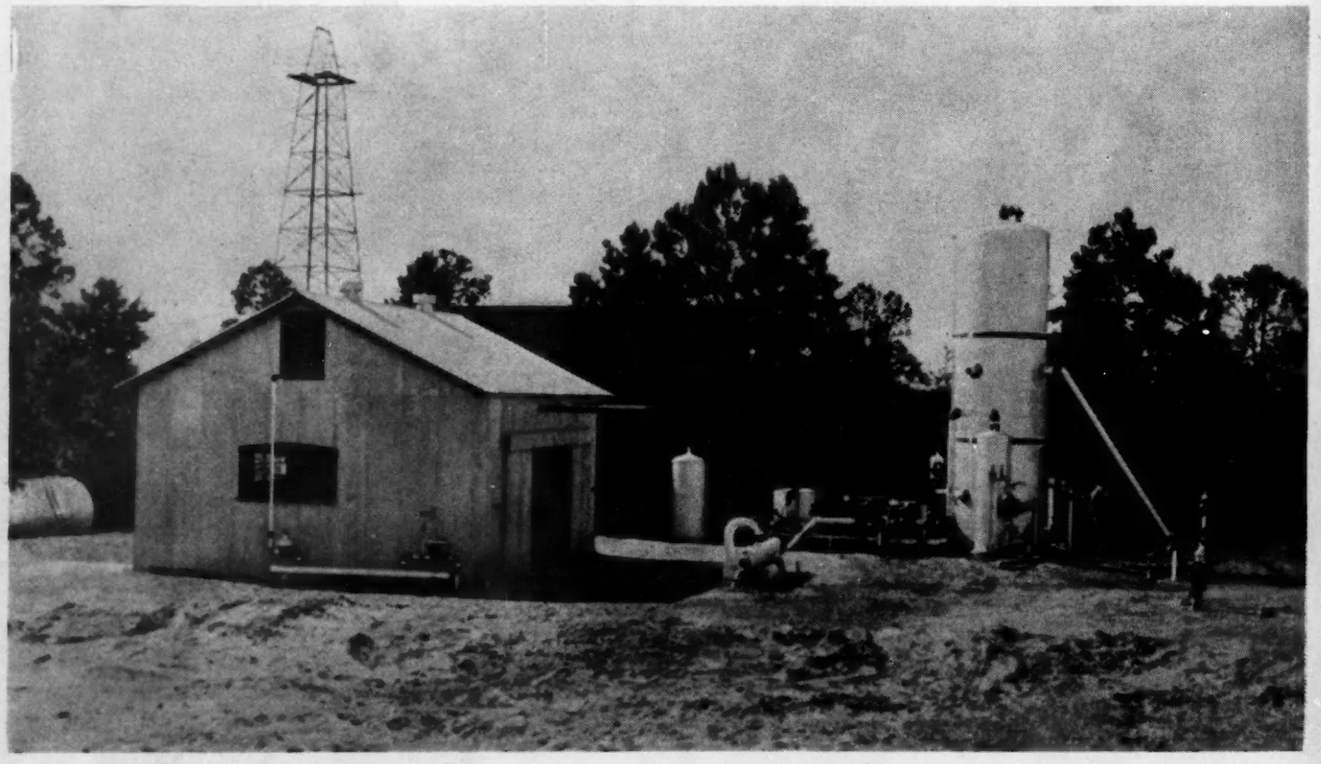

FIGURE 1

Ellis Oil Company's gas-lift plant, showing discharge header system, separators, regulator controls, etc.

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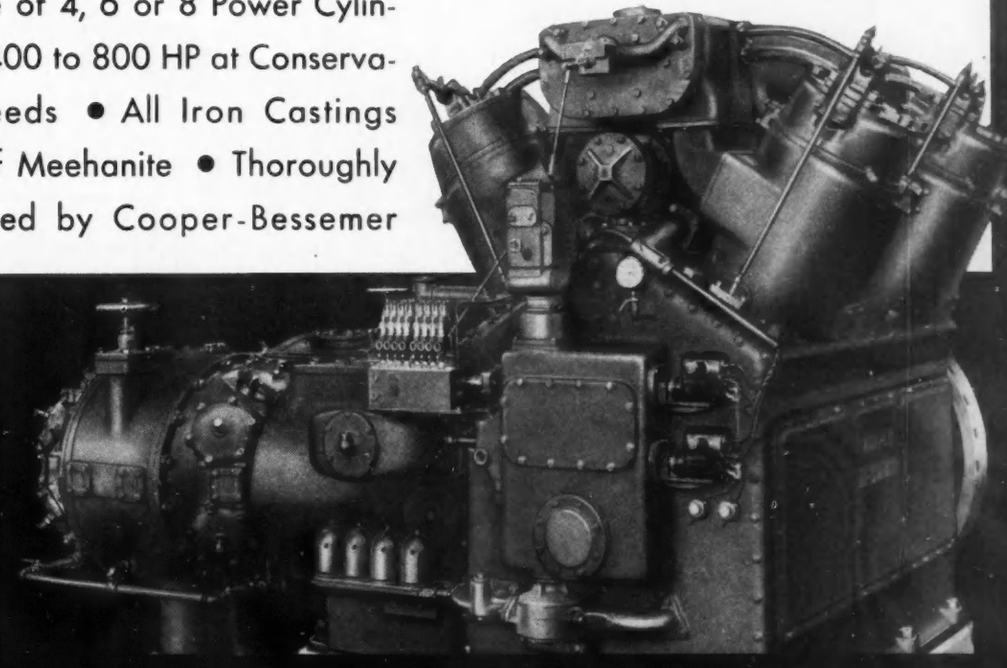

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leum Company acquired the C. J. Mackey and A. O. Phillips leases in the Sarah Harrell Survey, Upshur County, of the East Texas field. At that time there were 13 producing wells on the 147-acre Mackey lease and 3 on the 20-acre Phillips lease. Ten of the wells on the Mackey and 2 on the Phillips were then being produced by individual and back-cranked pumping units. The balance of the wells were flowing.

Since the time of purchase, 10 additional wells have been drilled on the Mackey and 1 on the Phillips, making a present total of 27 wells on the two leases.

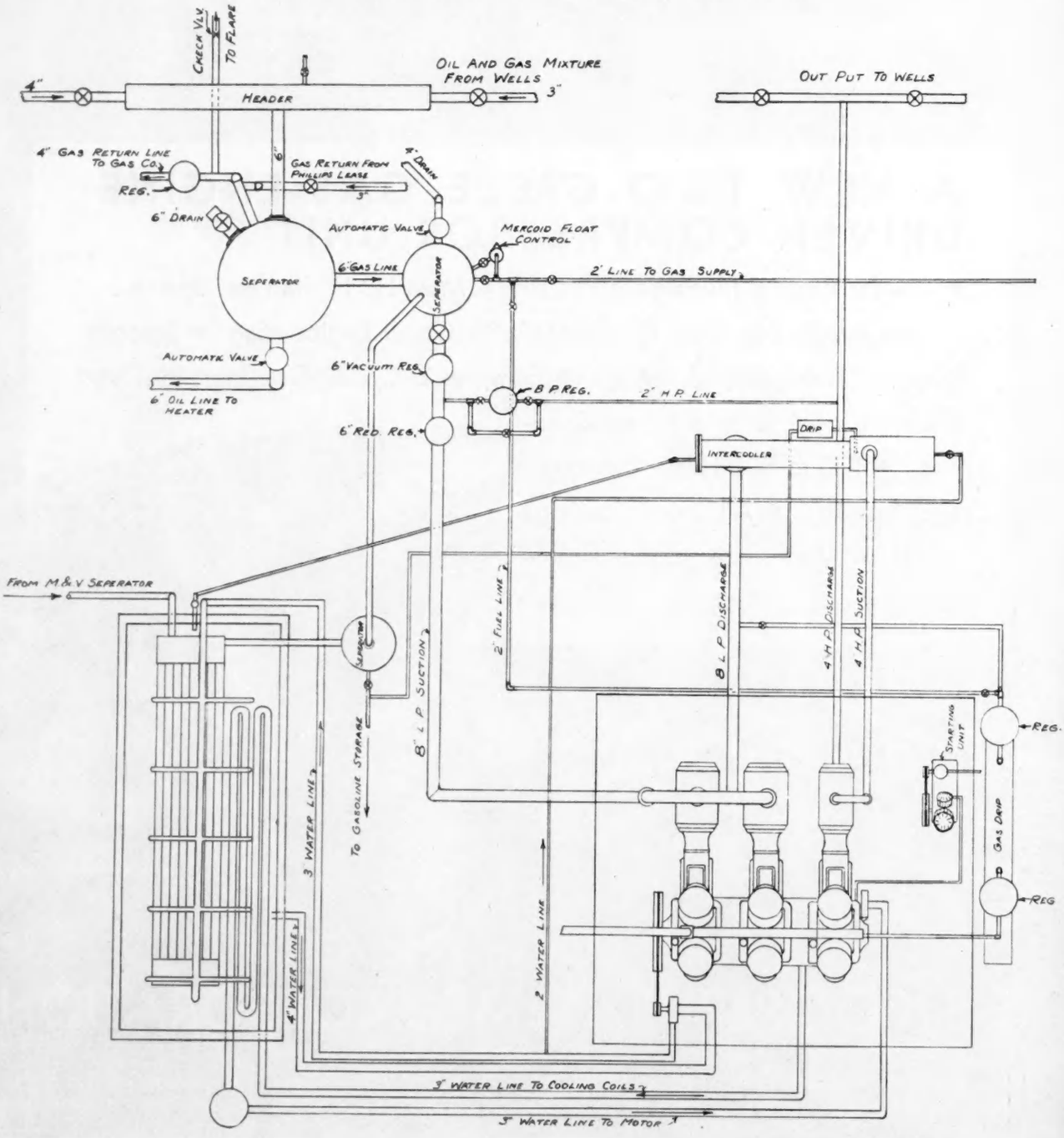
About 3 months ago it was decided to place equipment over the flowing wells in order that at the termination of their flowing life they could be equipped immediately to go on with their regular production. Based on 3½ years experience of producing East Texas wells by the gas lift method and on some 25 years experience in the oil business in general, the officials of the company decided to install a central gas lift plant for the entire 27 wells on the two leases.

A 225-horsepower angle type gas engine and compression unit was installed, which is considered sufficient to produce the two leases for the next 3 to 5 years. An additional unit of the same size is to be installed when required, as a total of 450 horsepower is calculated as being sufficient to carry the 27 wells to depletion.

The equipment installed in conjunction with the compressor, shown in Figures 1 and 2, consists

FIGURE 2

Compressor plant layout of Ellis Oil Company in East Texas



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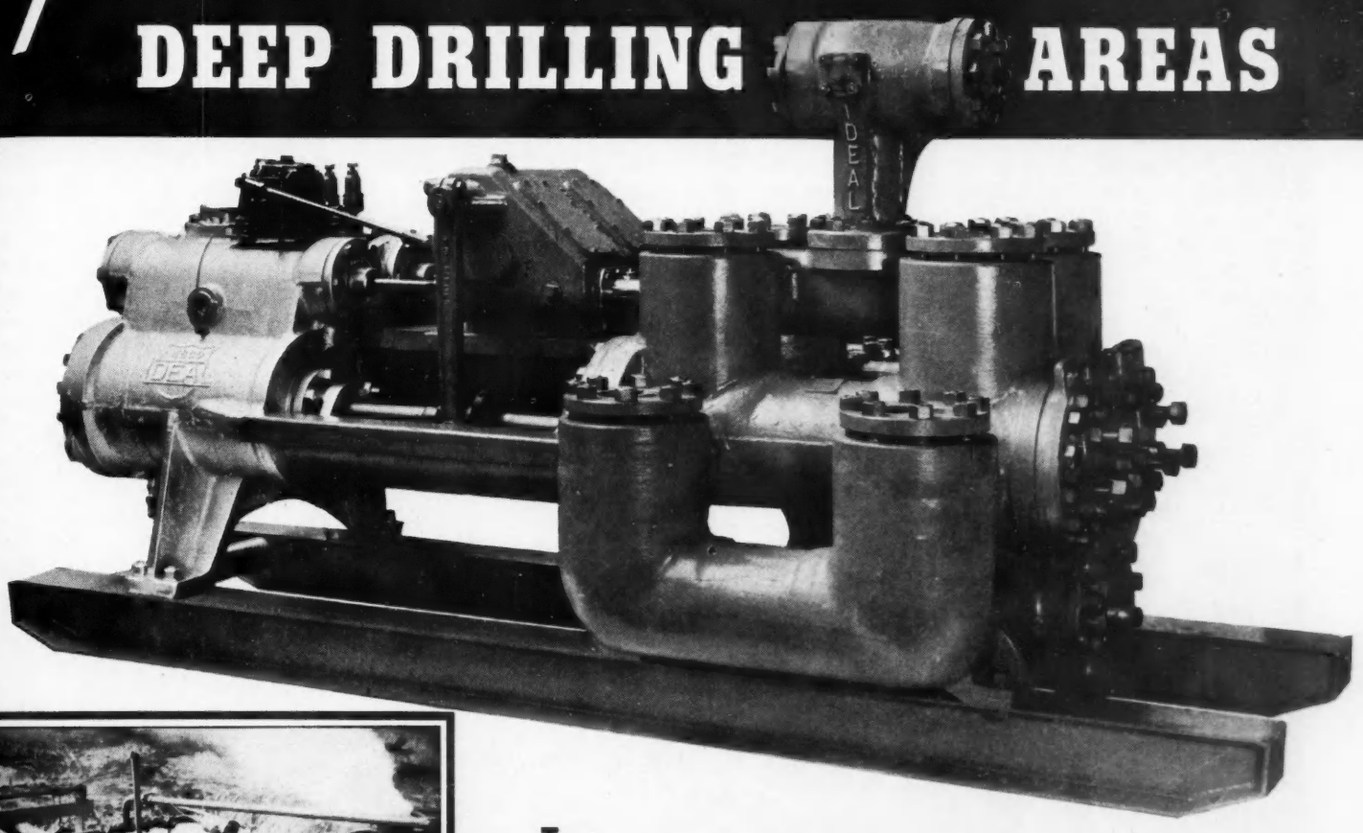

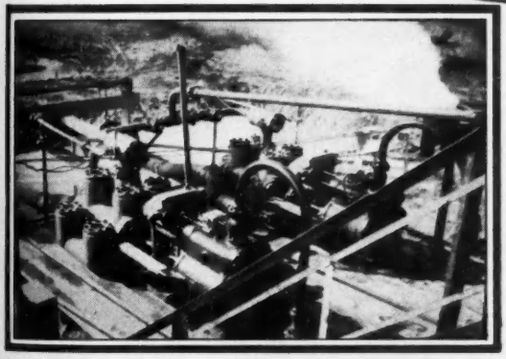

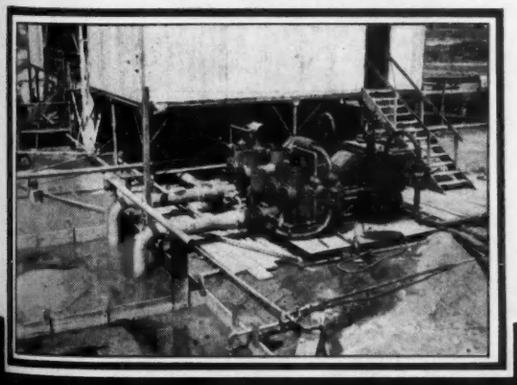

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of a large separator in which the oil, gas and water produced from the wells is collected, separating the gas from the liquid. The gas from this separator then passes to an auxiliary separator which acts as a "scrubber" in the event any appreciable amount of liquid might be carried over and thereby pass into the compressor. This auxiliary separator is equipped with an automatic trap to dump any liquid that might be collected. As an added precaution, a mercoid switch was installed to automatically stop the machine in the event the trap should fail to dump.

From this secondary separator the gas then passes through a vacuum regulator and a 6-inch reducing regulator to the suction of the compressor. The gas enters the low stage of the compressor at a pressure of approximately 5 pounds and is discharged at 75 pounds. The 5 pound intake pressure is controlled by the regulators mentioned above and at the main separator by a relief valve on the vacuum line to the casinghead gasoline plant. The wet gas produced over and above plant requirements is delivered automatically to the gasoline plant through this relief valve.

On being discharged from the low stage of the compressor, the gas passes through an inter-cooler which removes the gasoline condensate that is entrained with the gas. The product knocked out in this inter-cooler is removed by an automatic dump-trap and goes to gasoline storage. After passing through the inter-cooler, the gas is then boosted in the high side of the compressor from 75 pounds up to approximately 350 pounds, which is the normal operating pressure of the gas lift system. The high-pressure gas is discharged from the compressor through a header that equally divides the wells to the north and south of the plant, a picture of which is shown in Figure 3.

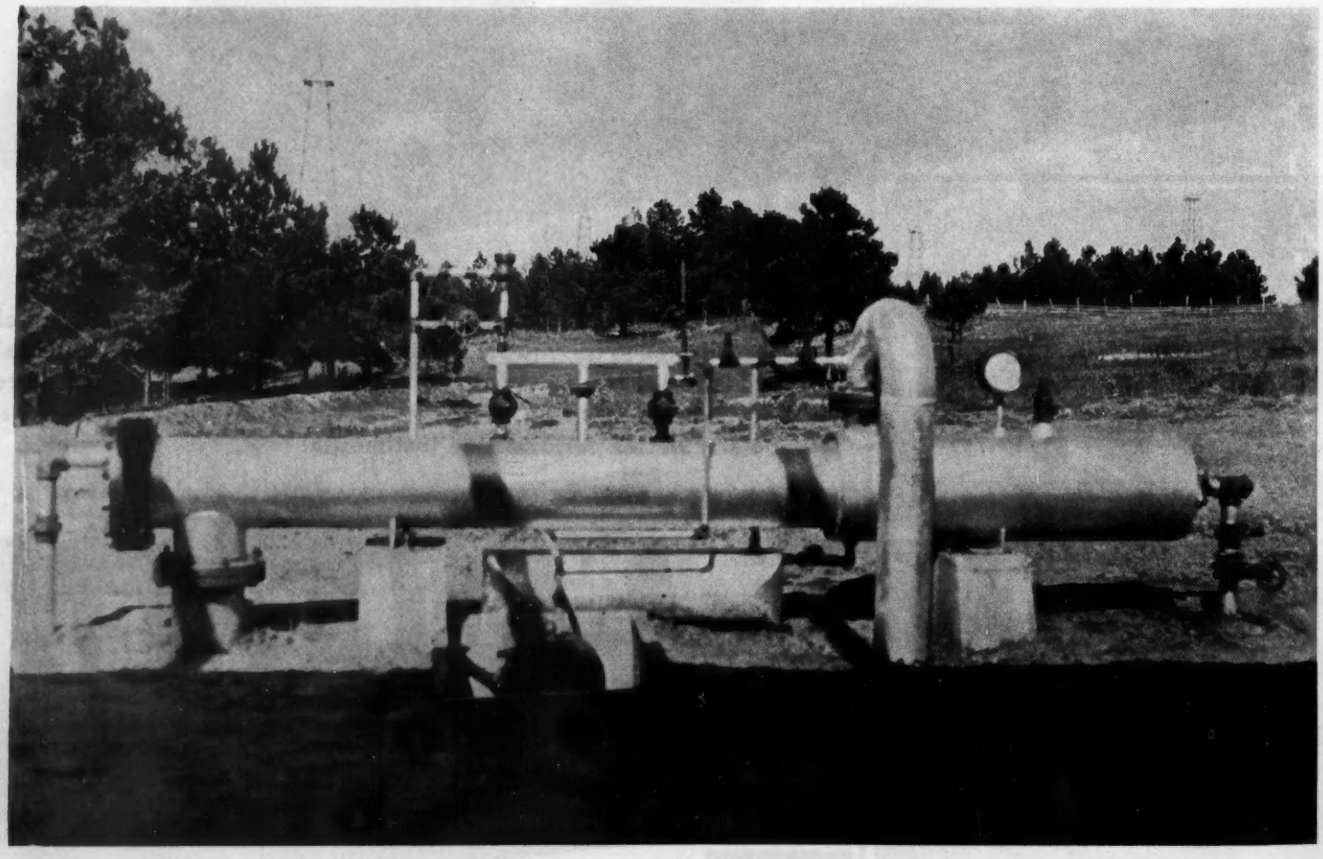
The oil and water, with whatever gas that is retained in solution, leaves the first separator and passes through a heater which breaks down the emulsion. From the heater the fluid passes to another separator which removes any gas that might have been carried with the oil and passes it through a cooling tower and condenser which knocks out as much condensate as possible before returning the gas to the secondary separator at the compressor plant where it is recycled in the gas lift operation. The cooling tower also contains the coils of the closed water system of the gas engine.

The novel feature of this construction is the recycling of the gas used to lift the oil from the various wells. The ordinary East Texas gas-lift installation receives the gas for compression in a dry form from a gasoline plant return residue line and merely boosts the pressure before it is injected into the casing of the wells for fluid lifting purposes. In this type of plant, the gas, after lifting the oil, is returned to the separator which in turn is connected to a vacuum line leading back to the main casinghead plant. In Ellis Petroleum Company's installation, the gas is recycled over and over again and does not draw on the residue lines for the complete supply as is done in the conventional gas-lift system.

When this plant was first put into operation it was found that the average gas-oil ratios were higher than was desired for economic operation. The principal cause of this high ratio was found to be the unusually long 2-inch

FIGURE 3

Discharge header system from compressor station of Ellis Oil Company in East Texas field.



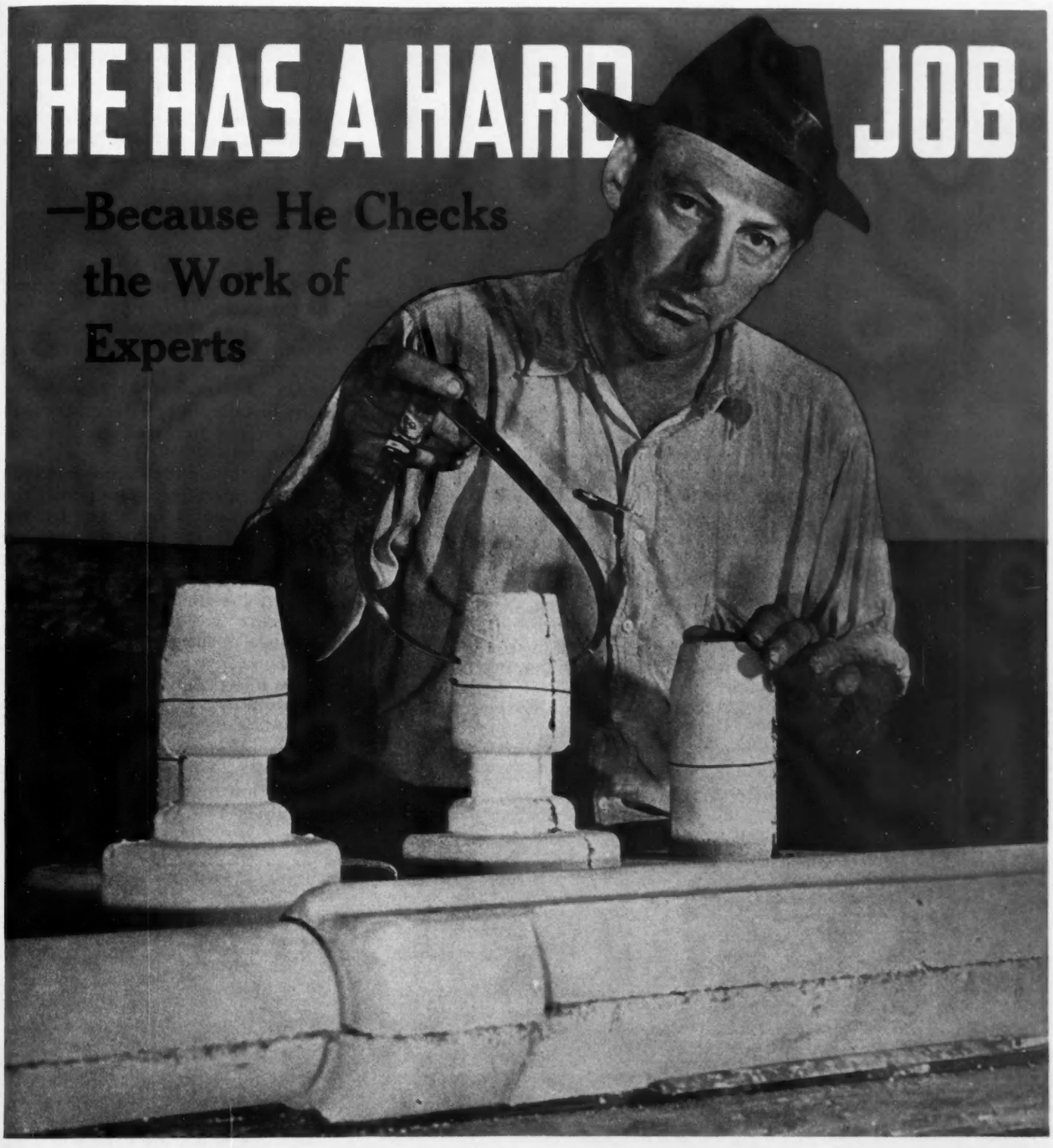


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FIGURE 4

A main 4-inch flow line with two-inch laterals to wells. All 90° bends have been eliminated.

flow lines and excessive number of 90° turns through which the fluid had to travel. These conditions caused high friction losses and created excessive back pressure that prevented the proper closing of the flow valves. Also there was the slippage, or break-through, of the gas that could be avoided only by removing as many ells as possible and the installation of a flow line of sufficient size to carry the fluid produced with a minimum friction loss. To correct these conditions a 4-inch flow line was laid through the center of the lease with short 2-inch lines connecting the individual wells to this main line; the method of streamlining may be seen in Figure 4. Also, all well head connections were streamlined, and a typical installation may be seen in the accompanying photograph, Figure 5. With the present streamlined flow arrangement, the oil and gas leave the well and have no turns to make above 45°. After these changes in the system were made it was found that our operating efficiency was greatly improved. We can produce our 20-barrel allowable from all of the 27 wells connected to the plant in approximately 9 hours, or at the rate of 60 barrels of oil per hour.

Some experimenting has been done to determine the number of flow valves necessary to produce the wells efficiently. It was found that under general operating conditions, eight or nine valves per well gave the most satisfactory performance and offered the greater flexibility.

It has been the practice of the company to keep a man close to the plant most of the time; however, due to the modern automatic devices installed, it is not really necessary. The compressor is equipped with mercoid switches which will shut the plant down in the event the machine should overheat, the oil system become clogged, or if any liquid should be brought in with the suction gas. The plant is as nearly automatic as possible for both operation and safety. Only three men are employed to handle all lease operations and, to produce the 27 wells.

The total installation cost was approximately $1500 per well. The cost of the additional 225-horsepower compression unit which will have to be added to deplete the leases, plus additional flow valves to be installed when necessary will increase the per well cost to approximately $2250.

In addition to the saving involved from an operating standpoint, the lease revenue is increased by the amount of casinghead gasoline produced. Under present operating conditions this plant produces casinghead gasoline in an amount that takes care of the major portion of the lease operating expenses.

This method of production is expected to withhold water encroachment and considerably increase the amount of recoverable oil.

It is anticipated that the additional oil recovered will pay for the installation of this equipment several times over.

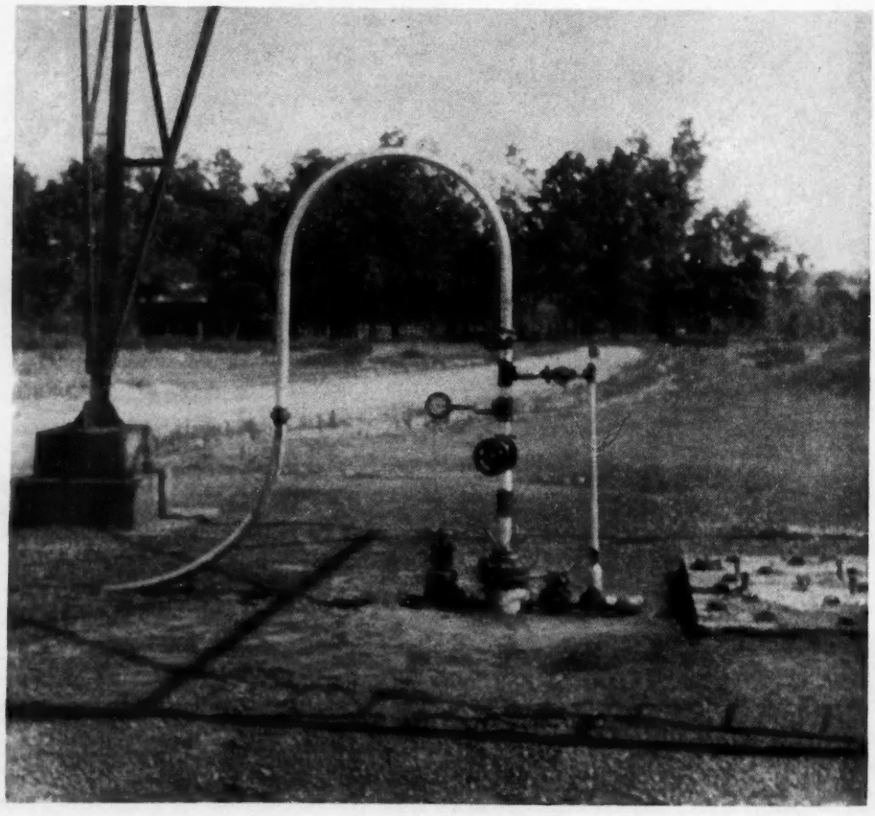

FIGURE 5

Typical streamlined well head on Ellis Oil Company's Mackay lease.

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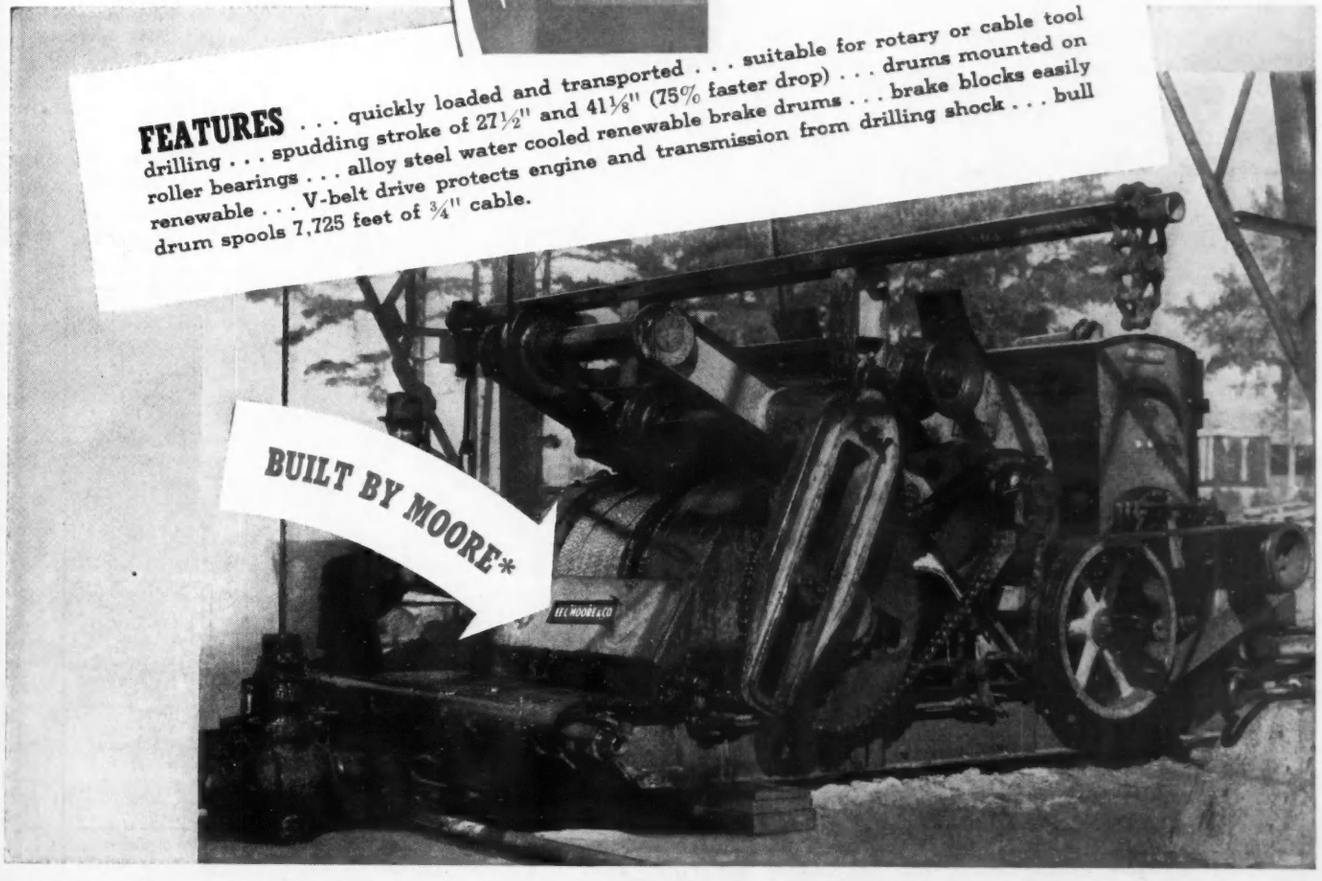

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IN WEST CENTRAL LOUISIANA AND EAST TEXAS

A Discussion of the Possibilities of Future Oil Production from the Eocene Beds in the Area Lying South and Southeast of the Sabine Uplift and North of the Salt Dome Belt

By PAUL THOMAS

CERTAIN recent developments in the northern part of the salt dome belt (see Figure 1) have increased the interest of the oil fraternity in the possibilities of future production in the area lying north of the salt dome belt and south and southeast of the Sabine uplift. These developments are: The finding of the first commercial production from the Sparta sand in Louisiana and East Texas at Ville Platte, Evangeline Parish, Louisiana; the establishment of production from sands in the upper Wilcox section at Spurger, Tyler County, Texas, and at Segno, Polk County, Texas, and the finding of new sands in the Saline Bayou section at Segno. These developments occurred in 1937 and the first half of 1938.

Brief History of Development of Area

Production from beds of Cretaceous age was estalbished on the Sabine uplift many years ago. The area to the south of the uplift had received little attention prior to the discovery of Tertiary (Wilcox) production at Urania, La Salle Parish, Louisiana, in 1925, but this discovery led to a rather intensive drilling campaign along the Angelina-Caldwell flexure, which is a monocline skirt-

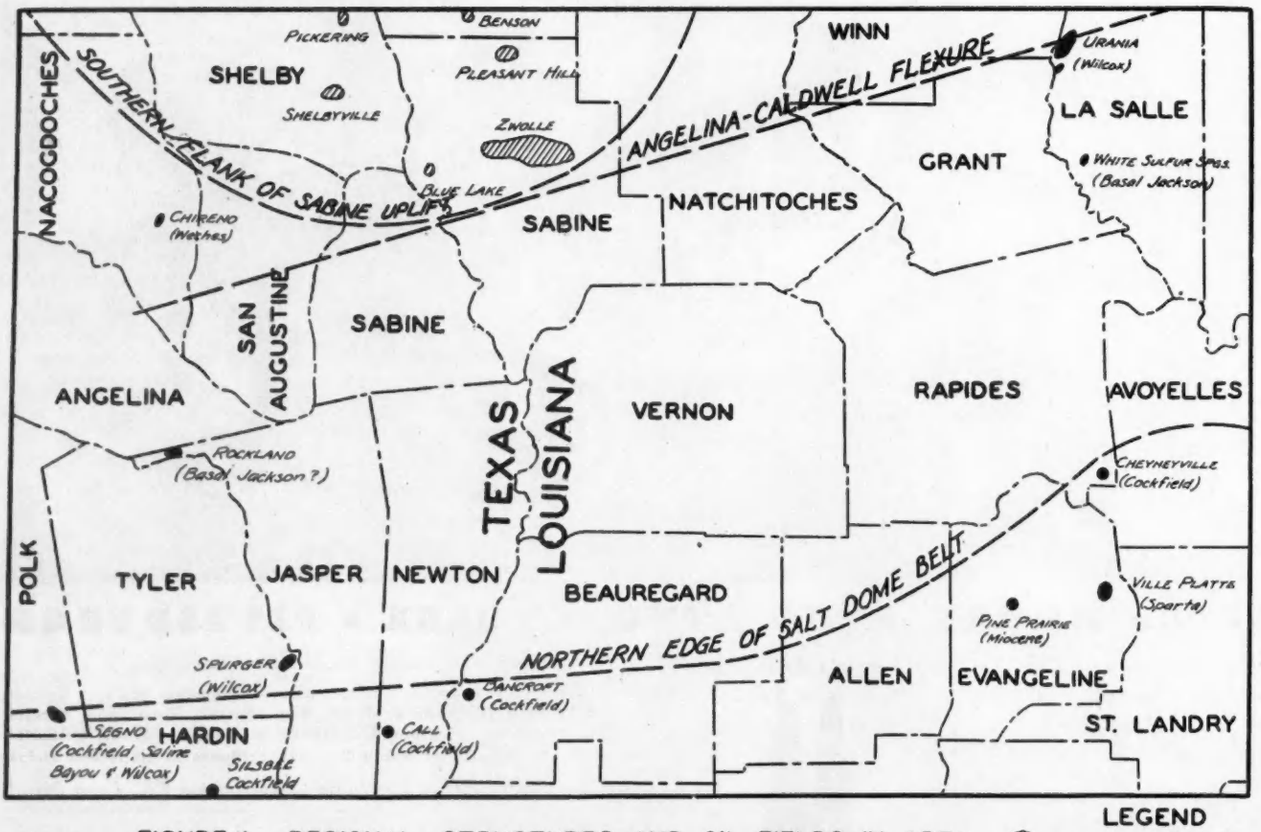
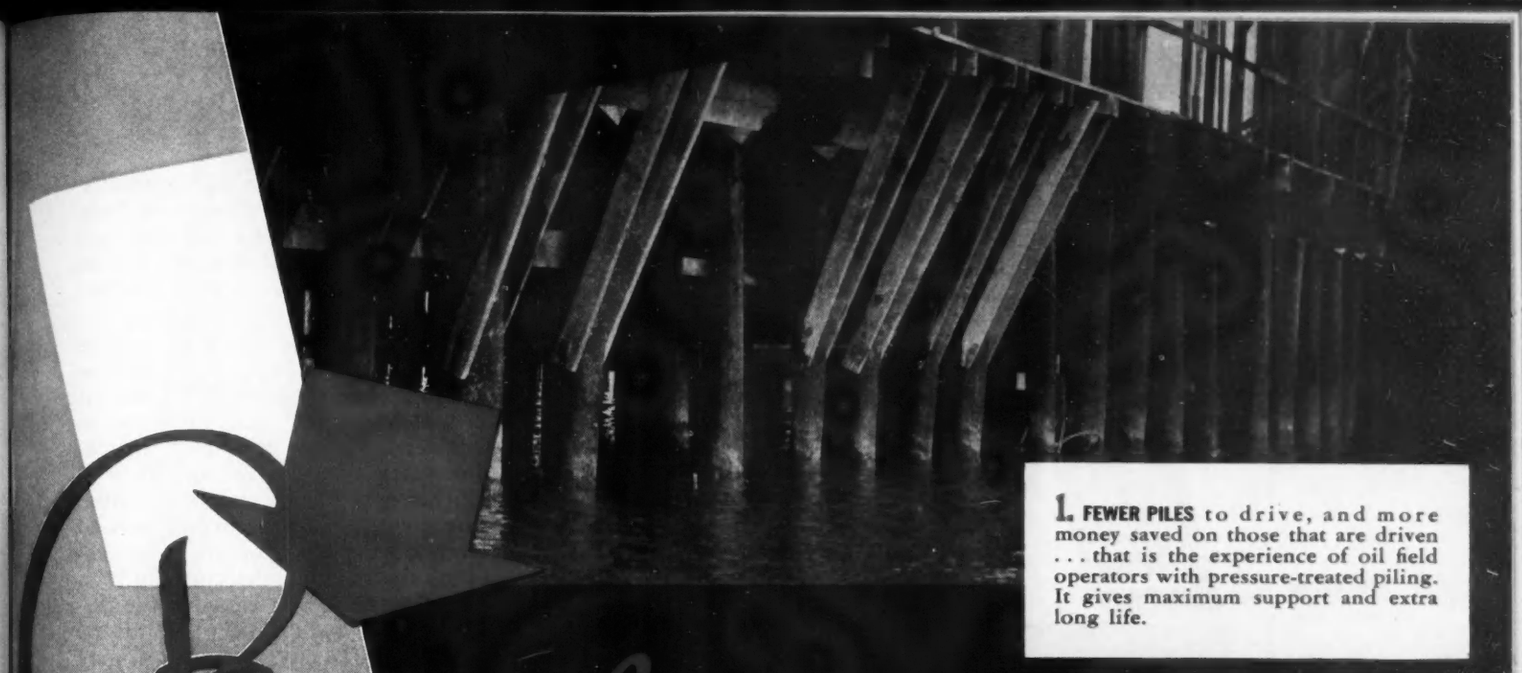


FIGURE 1 - REGIONAL STRUCTURES AND OIL FIELDS IN AREA



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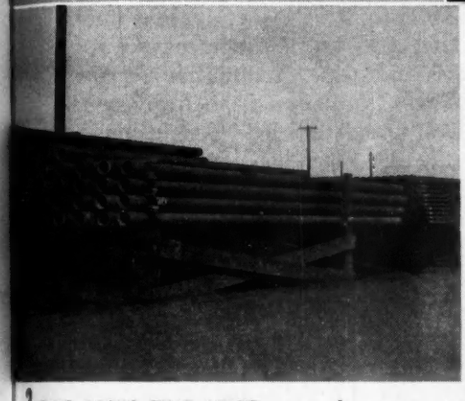
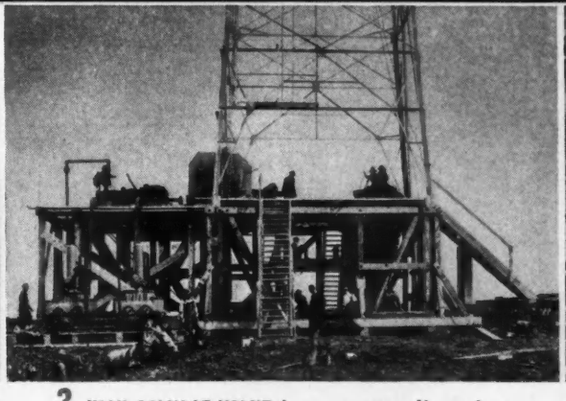
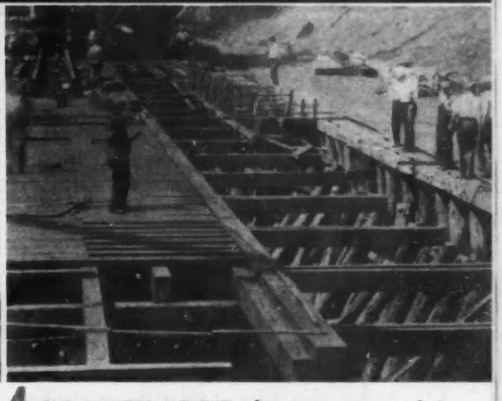


2. PIPE RACKS THAT SERVE, year after year, are built of pressure-treated timber. Its resilient strength endures the strain of heavy loads, and it is virtually unaffected by the severest weather.



3. HIGH SALVAGE VALUE is an outstanding characteristic of pressure-treated timber. It is free from the dangers of decay and termite attack—resists mechanical wear—and is readily handled for other use.



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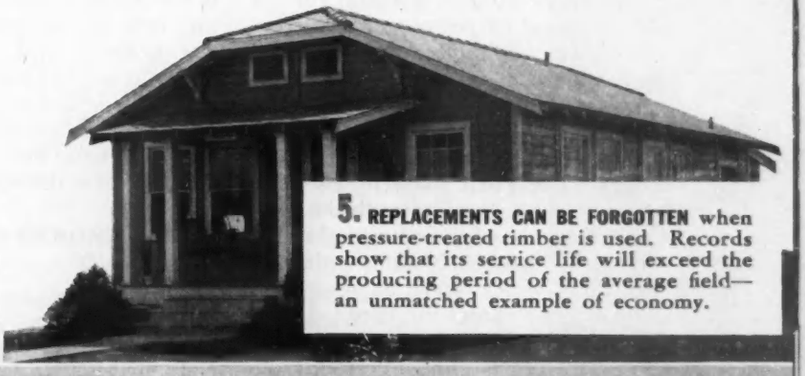

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FIGURE 2
Generalized Geologic Column of Area (Eocene)

Age	Group	East Texas Formation	Louisiana Formation
EOCENE	Jackson	Fayette	Danville Landing
			Yazoo Clay
			Moody's Branch marl
	Claiborne	Yegua	Cockfield
		Crockett (Saline Bayou member, Milams member, Crockett member)	Cook Mtn.
		Sparta	Sparta
		Weches	Cane River
		Queen City	
		Reklaw	
		Carrizo	
	Wilcox (Sabine in Louisiana)	Sabinetown	Wilcox
		Rockdale	Mansfield
		Seguin	
	Midway	Wills Point	Undifferentiated
		Kincaid	
Upper Cretaceous			

ing the south flank of the Sabine uplift and extending from Angelina County, Texas, to Caldwell Parish, Louisiana (see Figure 1). The results of this campaign were negligible, and it was soon abandoned.

The discovery of prolific Cockfield (Claiborne) production at Conroe, Montgomery County, Texas, in 1931 led to intensive activity along the Cockfield trend which includes the southern part of the area under discussion. Most of the structures and production in this part were found during this trend play. Interest gradually decreased during the next few years, but has recently been revived by the developments mentioned before.

Theoretical Considerations

The three factors essential for the accumulation of petroleum into commercially exploitable pools are sufficient source material, suitable reservoir rocks, and structural traps in which the oil may accumulate.

Source Material and Reservoir Rocks—The great majority of geologists who are familiar with the Gulf Coast area are of the opinion that the oil in that area originates either in the sands which serve as reservoirs or in marine shales interbedded with those sands. The ultimate source of the petroleum is almost certainly organic material of either plant or animal origin.

In the Gulf Coast area the requirements of adequate source material and suitable reservoir rocks are best fulfilled in sections which were deposited along former shore lines where minor advances and retreats of the sea have caused the accumulation of thick sections of interbedded sands and shales rich in organic matter. Most of the production in the Gulf Coast area comes from sections of this type. Belts in which the different formations best fulfill these requirements are usually parallel to the present shore line and range from 50 to 100 miles in width.

The estimates of the probabilities of future production from the different formations appearing later in this article are based upon the hypothesis that prospects of production from any given formation are most favorable in the belt in which that formation merges from predominantly continental in character to predominantly marine in character. Seaward from this belt the sediments become very fine grained, and, although organic material is abundant, reservoir rocks are thin or lacking, while landward from this belt suitable reservoir rocks are abundant, but adequate organic material is wanting.

Structural Traps

Structural closure seems to be prerequisite to production on the Gulf Coast. Production from stratigraphic traps is rare or entirely lacking.

In the salt dome belt most of the local structures are either known or inferred to be associated with salt intrusions of the typical Gulf Coast type. The northernmost proven salt dome in the salt dome belt is Cheyneyville, Rapides Parish, Louisiana. Over a dozen salt domes have been located in northern Natchitoches and Bienville Parishes, Louisiana, but no production has as yet been obtained from them.

Local structures seem to be rare along the Angelina-Caldwell flexure and in the area immediately south of it. Inability to find local structures in that territory has retarded exploration work there. However, there is conclusive evidence that differential movements have occurred several times during the Eocene epoch between the Sabine uplift and the East Texas syncline and between the Sabine uplift and the area south of the flexure. These movements may have produced local structures of the large, low-relief type similar to Urania.

Discussion of the Different Groups and Formations in the Geologic Section

In the following paragraphs a brief description of each of the groups and formations is presented. Particular emphasis is placed on the positions of the old shore lines and on the extent of development. An appraisal of the potentialities of the group or formation is then given in the paragraph entitled "Conclusions."

Figure 2 shows a generalized Eocene column for the area under discussion.

The formations outcropping in the area are of Tertiary age. They become progressively older as the distance from the Gulf of Mexico increases, the oldest being of Wilcox age. They dip gulfward at an average rate of 100 feet per mile.

Midway Group

General Description—The Midway group lies unconformably upon the Upper Cretaceous beds throughout the Gulf Coast. It does not outcrop in the area under discussion except in very limited areas around some of the North Louisiana salt domes in Bienville and Natchitoches Parishes, Louisiana. On the Sabine uplift where it has been penetrated by many wells, the Midway group is about 600 feet in thickness. It is composed chiefly of marine clays, with a few beds of sand marl.

Conclusions Regarding Potentialities of the Midway Group—No commercial oil has been obtained from Midway strata in this area, and, in view of the great number of wells

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which have been drilled through them on structure in search of Cretaceous production on the Sabine uplift, little may be expected of them. Howe[1] points out that much may be expected at the basal contact of the Midway strata where the oil-producing upper Cretaceous beds have been truncated by erosion and sealed by the impervious Midway clays.

Wilcox Group

General Description—The Wilcox group (called Sabine in Louisiana) outcrops on the Sabine uplift. It is predominantly continental in character on its outcrop, being composed of sands, silts and silty clays and containing much lignitic material. These beds increase rapidly in thickness from 400 feet on the outcrop to 3000 feet in central Louisiana[1].

On its outcrop in East Texas the Wilcox group[2] is divided into three formations: the Seguin at the bottom, the Rockdale in the middle, and the Sabinetown on top (see Figure 2). The Seguin and Sabinetown formations are apparently shallow marine deposits, being composed of sands and clays. The Rockdale formation is continental in character along its outcrop. It is composed chiefly of sands and clays with some lignite.

Shoreline Conditions—Howe[1] points out that the Wilcox beds rapidly become marine south of the De Soto-Sabine Parish line, which would place the shoreline near that line during most of Wilcox time. The extreme thickness of Wilcox sediments in the central part of the area would indicate that shoreline conditions prevailed there during at least part of the time.

Extent of Development—The upper part of the Wilcox group produces at Urania, La Salle Parish, Louisiana, at Spurger, Tyler County, Texas, and at Segno, Polk County, Texas. This section is virtually untested throughout the southern part of the area.

Conclusions Regarding Potentialities of the Wilcox Group—The Wilcox group apparently offers an ideal section for the formation and accumulation of petroleum throughout the area under discussion. Shoreline conditions are indicated by these sediments in the northern and central parts of the area. Production is obtained from them in the southwestern part.

In Figure 3, which shows the locations of the belts in which the different formations are most liable to produce, the northern limit of probable Wilcox production is parallel to and slightly north of the Angelina-Caldwell flexure and the southern limit is along the line where the top of the Wilcox lies approximately 9000 feet below the surface.

No test on a proven structure in the belt of probable Wilcox production on Figure 3 should be regarded as complete without thoroughly testing the entire Wilcox section if it is within reasonable drilling distance.

Claiborne Group (Carrizo and Queen City Formations)

General Description—Although these formations do not lie in contact

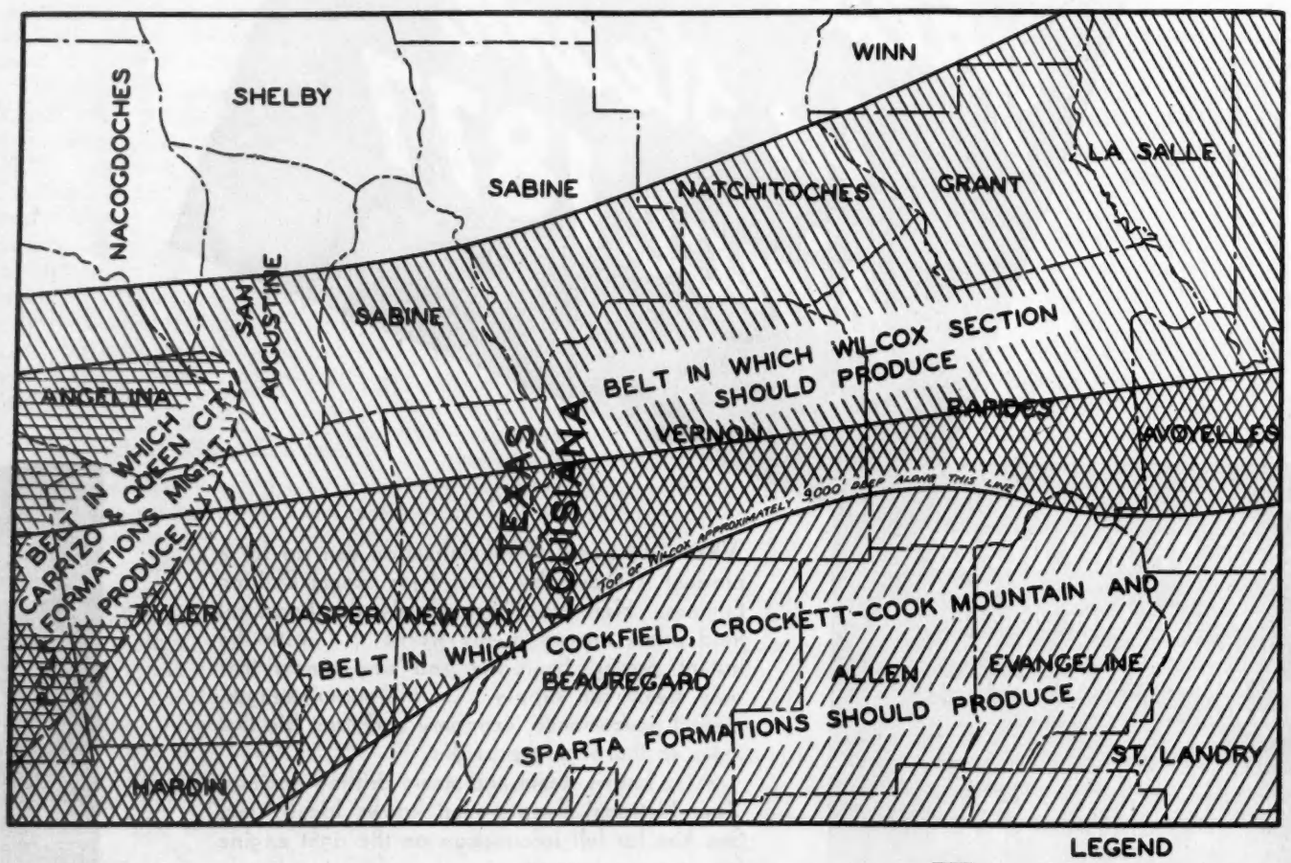

FIGURE 3 - BELTS IN WHICH DIFFERENT FORMATIONS ARE MOST LIABLE TO PRODUCE

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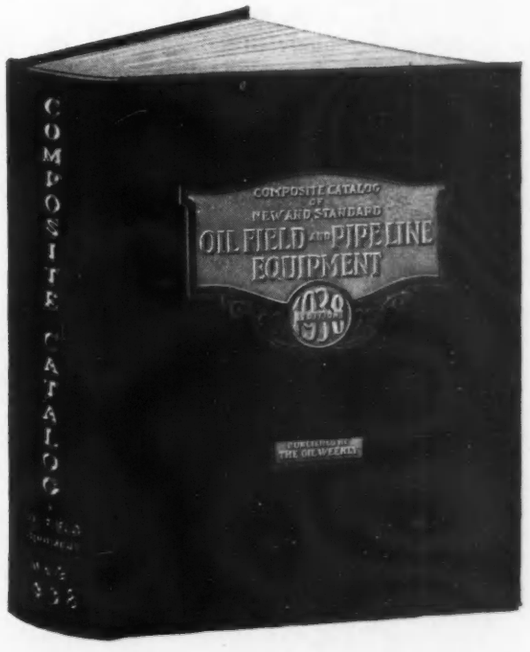
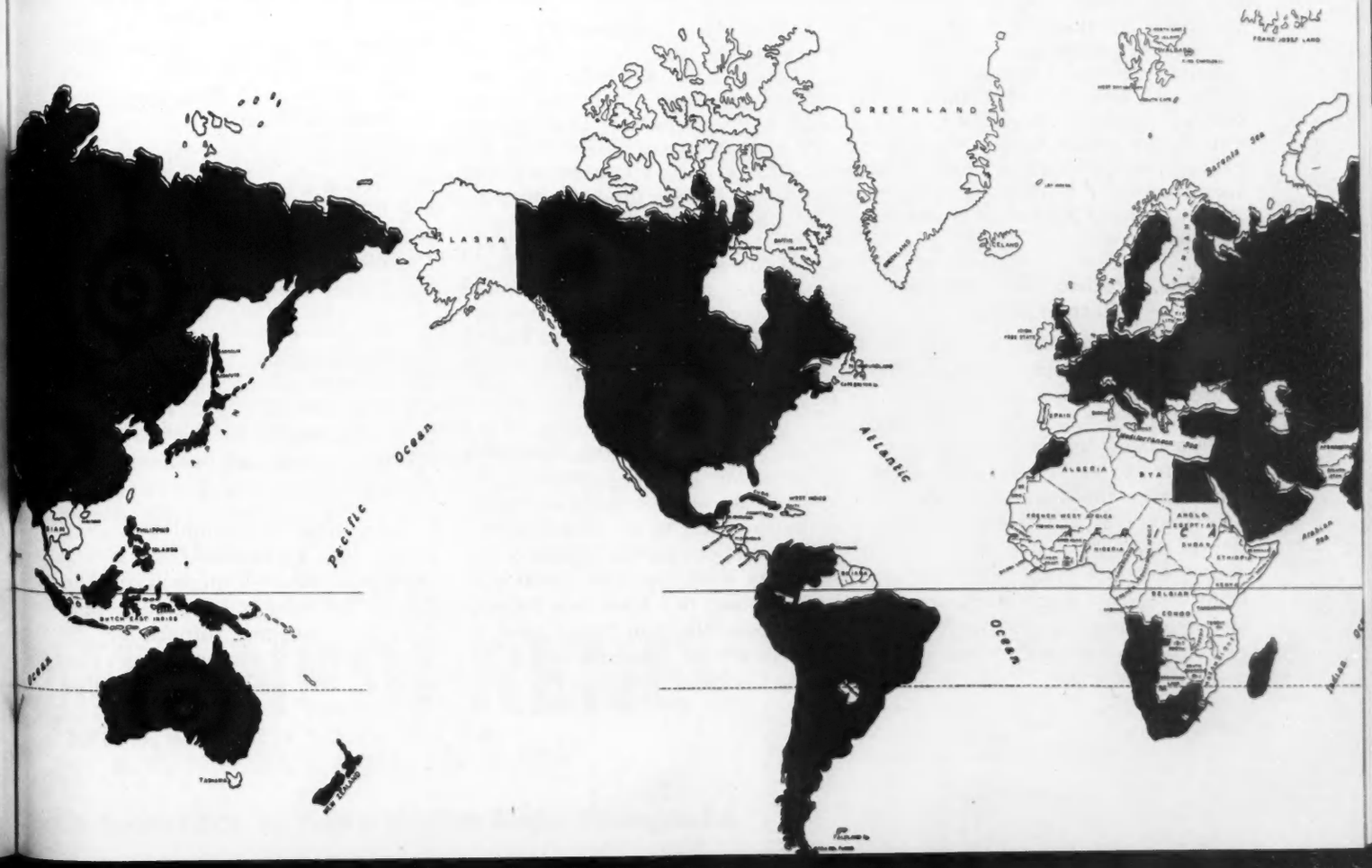


The states and countries shown in blue below have production or exploration work under way or have headquarters of producing or pipe line companies. A total of more than 10,000 men in these areas have received copies of The Composite Catalog.



with each other (see Figure 2), they are combined in this discussion because of their similarities in character and distribution. Wendlandt and Knebel[3] have mapped the Carrizo sand as far east as the Louisiana line in northern Sabine County, Texas, but it has not been mapped in Louisiana. Plummer[2] says that this formation is for the most part continental in character on its outcrop and that it is composed chiefly of sands with some sandy clay. It is about 100 feet in thickness. The Queen City sand does not exhibit a well developed outcrop in this area. Miss Ellisor[4] describes this formation as consisting of sands and sandy shales in wells in western Angelina County, Texas. The Queen City formation is also about 100 feet in thickness. Miss Ellisor says that the Carrizo sand pinches out in central Angelina County, and the Queen City sand pinches out in western Angelina County.

Shoreline Conditions—Moody[5] says that the Queen City sand was deposited on the coastal plain while marine sedimentation was occurring to the east. The same is probably true of the Carrizo sand.

Conclusions Regarding Potentialities of the Carrizo and Queen City Formations—These formations best fulfill the requirements of shoreline conditions in the extreme western part of the area under discussion. To date there is no production from either of them, but they have not been well tested. The boundaries of the area of possible Carrizo and Queen City production are rather indefinite on Figure 3 because very few wells have been drilled to these formations south of Angelina County. One factor which lessens the probabilities of production from these formations is that they are comparatively thin and the belt of transition may be narrow.

Reklaw, Weches and Cane River Formations

General Description—These formations are grouped together because of their similar characteristics. The Weches, Queen City, Reklaw and Carrizo formations of Texas are considered to be the equivalent of the Cane River formation of Louisiana (see Figure 2). The Reklaw formation is about 80 feet in thickness on its outcrop. It is marine in character, being composed chiefly of glauconitic and gypsiferous clays. The Weches green sand overlies the Queen City formation in East Texas. It is of marine origin, and Miss Ellisor[4] gives it a thickness of 160 feet in Angelina County. The Cane River formation of Louisiana is composed chiefly of marine clays with some marl in the basal part. It averages about 125 feet in thickness along its outcrop.

Conclusions Regarding the Potentialities of the Reklaw, Weches and Cane River Formations—The Weches formation is the only one of these three which has produced commercial oil, having produced a little at Chireno, Nacogdoches County, Texas. Since these beds are all predominantly marine, little can be expected of them in the way of future production.

Sparta Formation

General Description—The Sparta sand lies upon the Weches green sand in East Texas and upon the Cane River formation in Louisiana. Spooner[6] describes this formation as consisting of massive sands and sandy clays with some lignite in the upper part on its outcrop in Louisiana. He assigns it a thickness of from 400 to 500 feet. Its facies is similar in East Texas, but its thickness is less, ranging from 200 to 300 feet. It is distinctly continental in character.

Shoreline Conditions—Moody's[5] interpretation of paleogeography during Sparta time places the shoreline along a line extending from northern Jasper County, Texas, to southern La Salle Parish, Louisiana.

Extent of Development—The Ville Platte field, Evangeline Parish, Louisiana, is the only field in or near this area producing from the Sparta sand at the present time (July, 1938). It produces from about 60 feet of sand lying approximately 200 feet below the top of the formation. This formation has been partially tested at Cheyneyville, Rapides Parish, Louisiana, which is a proven deep-seated salt dome, but has failed to produce there so far. Schneider[7] says that oil shows have been logged in the Sparta sand at Urania, which is about 100 miles north of Ville Platte.

Conclusions Regarding Potentialities of the Sparta Formation—If Villa Platte may be taken as representative of degree of saturation and sand conditions in the Sparta sand, and there is no apparent reason why it should not, this formation has excellent possibilities of future production. No test on structure within the Sparta-Cockfield belt on Figure 3 should be abandoned without testing the full Sparta section. The northern limit of probable Sparta production on Figure 3 is placed along Moody's Sparta shoreline.

Crockett and Cook Mountain Formations

(Including the Saline Bayou, Milams and Crockett Members)

General Description—Miss Ellisor[4] has divided the section lying above the Sparta sand and below the Yegua (Cockfield) in East Texas and west central Louisiana into the Saline Bayou member on top, the Milams member in the middle, and the Crockett member on the bottom. This section is called the Crockett formation by many Texas geologists, but Miss Ellisor's divisions are used by many petroleum geologists working in this area, and will be used in this article.

Miss Ellisor says that L. C. Johnson[8] described the beds which she has taken as her type section for the Saline Bayou member as consisting of clays on top and lignitic and glauconitic sands on the bottom. Her Milams member is marine in character, being composed chiefly of calcareous, fossiliferous clays. Her Crockett member is composed of alternating clays and sands on its outcrop.

The total thickness of these members averages about 280 feet along the Angelina-Caldwell flexure.

The Cook Mountain formation is the Louisiana equivalent of the Crockett formation of Texas. This formation consists of about 150 feet of alternating sands and clays along its outcrop in Louisiana.

Shoreline Conditions—The beds in this section are predominantly shoreline deposits on their outcrop. They gradually become predominantly marine downdip, the sand zones becoming thinner and fewer in number.

Extent of Development—The Saline Bayou member is the only one of the three members which produces oil. It produces at Segno, Polk County, Texas, and in the territory lying to the southwest of the area under discussion.

Conclusions Regarding Potentialities of the Crockett and Cook Mountain Formations—Thin sand zones in this section may be expected to produce on structure throughout the southern part of the area under discussion. The probabilities are that

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these sands will not be so prolific as those of the Sparta and Cockfield formations, but they should be capable of yielding satisfactory commercial production. In order to simplify Figure 3 as much as possible, the belt of probable Crockett-Cook Mountain production has been combined with the Sparta-Cockfield belt, since they occupy approximately the same area.

Cockfield (Yegua) Formation

General Description—The Cockfield formation (called Yegua in Texas) is continental in character along its outcrop. Plummer[2] says that the Yegua formation averages 750 feet in thickness along its outcrop in East Texas, and that it consists of a heterogeneous complex of layers of sand, clay, lignite and sandy clay with some carbonaceous clay lentils. He assigns a thickness of about 750 feet to them. Spooner[6] describes the outcrop of this formation in Louisiana as consisting of massive sands, sandy clays and lignitic clays.

Shoreline Conditions—Moody[5] says that the shoreline extended through the area along a line from central Tyler County, Texas, to southern Avoyelles Parish, Louisiana, during most of Cockfield time. An inspection of well and Schlumberger logs in this area shows that the Cockfield is usually logged as sands and shales in the southern part of the area, which substantiates Moody's statement.

Extent of Development—The Cockfield formation is the only formation in the area which might be classed as a proven oil-producing formation. It produces in a belt about 50 miles in width which extends from Rapides Parish, Louisiana, far into Texas. It produces at Cheyneyville, Bancroft, Call, Silsbee and Segno in the area under discussion.

Conclusions Regarding Potentialities of the Cockfield Formation—The Cockfield formation may logically be expected to produce on structure throughout the southern part of the area. The five fields producing from the Cockfield have all been opened up within the past two or three years, and the next few years should see several more fields opened up along the Cockfield trend in this area.

Jackson Group

General Description—The Jackson group outcrops in the north-central part of the area. In Texas the Jackson beds are all included in the Fayette formation. This formation is about 400 feet in thickness along its outcrop and is composed chiefly of dark-colored, sticky clays with some interbedded sand. Plummer[2] says that these beds consist of marine, brackish-water, near-shore and continental deposits. This formation exhibits about the same characteristics and thickness in Louisiana as it does in Texas.

Electrical cores and well logs in the southern part of the area show that the Jackson section is composed chiefly of clays and shales in that territory. Some report sand near the top.

Shoreline Conditions—Moody[5] says that the Jackson sea extended as far north as central Arkansas during that age. Howe[9] says that over much of Louisiana the Jackson thins from the outcrop south, which indicates that marine conditions prevailed south of the outcrop and that the Jackson shoreline was near the present outcrop or farther north.

Extent of Development—Very little commercial production has been obtained from Jackson beds in this area. Howe[1] reports a little production from the basal Jackson at White Sulfur Springs, La Salle Parish, Louisiana, and at Anse la Butte, St. Martin Parish, which is considerably south of this area. THE OIL WEEKLY[10] reports a small amount of production at Rockland, Jasper County, Texas, from beds of questionable Jackson age. These occurrences of Jackson production are of more historic interest than economic importance.

Conclusions Regarding Potentialities of the Jackson Group—In view of the facts that these beds are predominantly marine throughout most of this area and that they have been penetrated on structure many times in the southern part of the area by wells in search of Cockfield production and have failed to produce, possibilities of commercial production from the Jackson group in the future are not good.

Conclusions

The conclusions of this article are best summarized graphically. Figure 3 shows the areal distribution of the belts in which the different formations are most likely to produce. There is no part of the area in which the geologic column does not possess adequate source beds and suitable reservoir rocks. In fact, there is no area on the Gulf Coast which possesses a more favorable column. The future of this area as an oil producing territory depends entirely upon whether or not local structures exist here. If local structures do exist, they will probably be of the large, low-relief type, and they should prove to be very profitable.

The Wilcox section should produce on structure throughout the northern and central parts of the area and as far south as wells can be profitably sunk to it.

The Carrizo and Queen City formations *might* produce in the extreme western part of the area where they merge from continental to marine. No production has been obtained from either of these formations in East Texas.

The Cockfield and Sparta formations should produce throughout the southern part of the area. The northern limit of probable Sparta production is rather problematical, being placed along Moody's Sparta shoreline. The Cockfield formation will probably not produce quite so far north as the Sparta.

The Crockett-Cook Mountain section, which includes the Saline Bayou member, has been proven by production from it at Segno and in fields farther to the southwest. This belt has tentatively been shown as coinciding with the Cockfield-Sparta belt. These beds will have to be more thoroughly tested to the east before a conclusion can be drawn regarding the probable areal extent of production from them.

Stray sands may produce in any of the formations not considered to be favorable to production, but consistent production from these formations is not to be expected.

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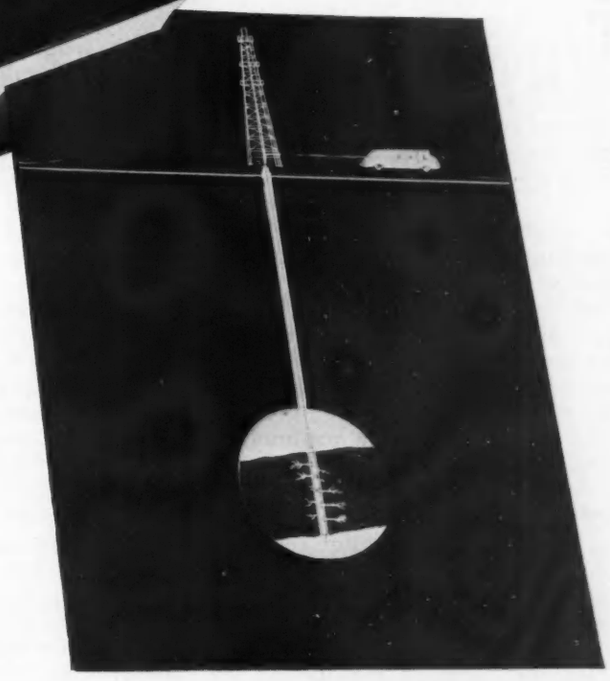
[9] H. V. Howe, personal communication.

[10] Oil Weekly for July 25, 1938, Vol. 90, No. 7, p. 177.

It's all Here



Page 1199 in the 1938 Composite Catalog is the blue cover of the Lane-Wells story about Gun Perforators, Directional Drilling, Well Surveys, Packers, Bridging Plugs, Whipstocks and Knuckle Joints. Twenty pages of valuable information show how wells can be drilled straight or to any predetermined point—how producing formations can be located—how casing and cement can be perforated for increased production—how liners can be hung without sagging—and many other helps that save time and money in making wells pay. Look for the blue cover near the middle of your Number 9 Composite Catalog, and study the instruments that have surveyed more than fourteen million feet of hole and perforated more than ten thousand wells with profit to the producers.

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"Floating Power" Pipe Line Bridge

By R. L. HAZLETT, Staff Writer

THE pipe line department of Sinclair Wyoming Oil Company has applied the "floating power" principal of modern automobile design in constructing a unique pipe line bridge for the line rider where its Salt Creek-Parco line crosses the recently ditched highline distributing canal on the Casper-Alcova irrigation project 17 miles southwest of Casper. The ditch crossing, a gap of 75 feet, likewise involved the first use of wrinkle bends in Rocky Mountain pipelining.

As the weight of the automobile rests on the rear axle housing, leaving the axle to turn freely unimpinged with the weight of the car, so the pipe line bridge rests on a housing of 10-inch casing with the 8-inch crude oil carrier within the 10-inch and free of bridge weight.

Besides carrying the weight of the bridge, the 10-inch casing serves the double purpose of protecting the line against rust and corrosion at its crossing above the water, and protects the irrigation water from being contaminated with oil should a break occur at the ditch.

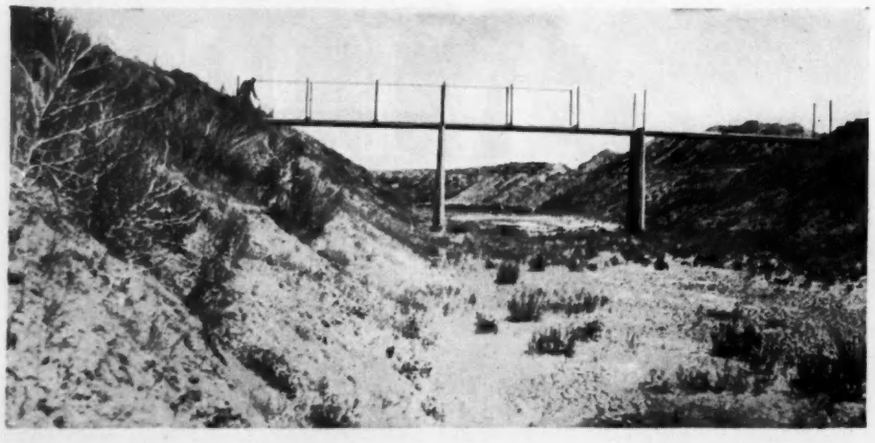
The Federal Reclamation Service erected two concrete piers for each bridge. The piers are 15 feet high, 6 feet in width at the base, and 4 feet at the top, with a uniform thickness of 12 inches. They are formed at the top with a semi-circular cradle in which the supporting 10-inch casing is placed.

The 10-inch casing extends 10 feet beyond the ditch on each side, and the 8-inch line is run through the 10-inch, and is made tight at each end by the bradenhead principle with a valve placed just within the bradenhead for bleeding off any oil that may occur to test for a possible leak. Eight-inch gates are placed ahead of the bradenhead to shut off flow in construction and for repair of the pipe at the crossing.

The 8-inch line is brought to the bridges on each side with 80 degree bends taking 11 wrinkles. This allows for ample contraction and expansion in the semi-arid climate where changes in temperature are rapid.

The bridge, except for the wood flooring, is all steel and of all welded construction. Ten 4-inch angle irons are welded on top the 10-inch and at right angles spaced 8 feet apart to form the cross members to support the wood flooring. Two-inch tubing is welded vertically to each end of the cross members, and form uprights 4½ feet in height. Welded to the top of this are 1½-inch sucker rods to complete the safety railing on each side of the bridge. The bridge is completed with a heavy 2-inch planking.

The bridge is one of extremely simple construction and eliminates guy wires and other cumbersome supports of the conventional pipe line bridge, and should prove to cut down considerably repair work and maintenance. All steel supports and all welded, it is a rigid bridge for the pipe line rider and his horse, and gives a safe crossing for all kinds of weather, and in a climate which in winter is often a time of heavy snows if not blizzards. The bridge eliminates any back tracking by the pipe line rider were he required to use the highway bridge which crosses the canal several miles below the pipe line crossings. The 4½-foot high guard rail makes the bridge an extremely safe one.



Employing the floating power principle, 10-inch casing supports the bridge weight, while the 8-inch line from Salt Creek to refinery at Parco runs through the 10-inch. The bridge is near completion with only a few days more work to complete the welding of the four and a half foot guard rail and to lay the wood floor covering.

WORLD DEVELOPMENT and TECHNOLOGY

Edited by
WM. V. GROSS, Associate Editor

Canadian Fields

Get good well on Turner Valley southwest flank.

French syndicate will deepen old Alberta test.

British Empire's deepest test drilling at 9748 feet.

IN line with the revived interest in the north end of the southwest flank of Turner Valley, Alberta's major oil field, Royalite Oil Company, Limited, last week announced location for No. 37 on Legal Subdivision 11, Section 5, Township 19, 2-w5, a quarter mile west of Vulcan-Brown Petroleum, Limited's 1, a recently completed outpost well which ranks as the field's second largest crude producer. Drilling in that section of the field has been neglected during the past year in favor of drilling to the south and southwest.

Royalite completed No. 33 on Legal Subdivision 2, Section 5, Township 19, 2-w5, one-half mile south of the Vulcan-Brown test, at 7676 feet, or 432 feet in the Madison. It was acidized and being given a production test.

Large Production Indicated

The second Alberta completion of the week was York Oils, Ltd.'s 1, Legal Subdivision 2, Section 20, Township 18, 2-w5, which stopped at 7417 feet, or 418 feet in the Madison lime. Drilled by Newell & Chandler, Limited, drilling contractors, the well was described as being in a highly porous zone, indicating large production. It was being cleaned of rotary fluid as the week closed. The York company owns four subdivisions in Section 20, and a tentative location for No. 2 has been chosen in the southeastern corner of Legal Subdivision 6, less than a quarter mile northwest of No. 1.

Lease Holdings, Limited, announced plans for drilling to completion the P. & H.-Alco 1, test in the extreme southwestern part of the field on Legal Subdivision 7, Section 5, Township 18, 2-w5, which has been standing at 1370 feet. P. J. Hatterman van Oudenol, president of Lease Holdings, announced that drilling would start shortly, and that within a month an engineer representing a French syndicate that is financing the well will arrive in Calgary to survey acreage that may be developed after completion of the P. & H.-Alco outpost.

Four proposals involving royalty on adjoining acreage or leases have been made by Okalta Oils, Limited, to Calgary & Edmonton Corporation, Limited, to bring early completion of the former company's No. 6, which is standing cemented at the top of the Madison limestone on Legal Subdivision 3, Section 30, Township 18, 2-w5. The well, at 9748 feet the deepest hole drilled in the British Empire, is almost two miles west of production and may prove large blocks of Calgary & Edmonton Corporation acreage. If a deal is not consummated with the Calgary & Edmonton Corporation, the rotary will be moved to complete the Okalta's No. 7 in the proven area of the field.

Following are outstanding developments on Alberta wildcat structures:

On the Ram River structure, cellar has been dug and derrick was being erected for Ram River Oils, Limited's No. 1. Four miles of roadway had to be built before material could hauled in, and heavy rains delayed the work.

On the Watson structure, directly south of Turner Valley and west of Lundbreck, Mar Jon Oil Company, Limited's No. 3 was rigged up with new rotary last week. The hole had been temporarily shut down at 5220 feet. The well has encountered promising shows of gas and oil, and is reported as logging satisfactorily. The structure has long been a favorite with geologists.

Move in Near Duke's Ranch

South of the Duke of Windsor's E. P. Ranch, J. & J. Syndicate has hauled timbers and machinery to their location on Legal Subdivision 9, Section 12, Township 16, 3-w5. Work on the cellar is to start immediately.

North Taber Royalties, Limited's 1, on the Taber structure, Legal Subdivision 7, Section 10, Township 11, 15-w4, encountered the Artesian water horizon at 604 feet, considerably higher than other wells in the general district, and 10 feet lower had the first gas showing. It was drilling at 825 feet at last report.

Guardian Oil Company, Limited's 1, Section 7, Township 80, 12-w5, on the Pouce Coupe structure, farthest north test drilling in Alberta, resumed from 1067 feet last week after setting casing.

In the Vera field of Saskatchewan, just east of the Alberta boundary, Vera Oilfields, Limited's 2 was drilling below 2100 feet. While the test is being drilled for a gas supply for the city of Saskatoon, several oil shows have been encountered which indicated the structure may be developed into an oil field. Present bottom is now close to the top of the Devonian, where crude in commercial quantities may be obtained.

One hundred natural gas wells in the Turner Valley field capable of producing 388,000,000 cubic feet a day, September 14 were given allowables by the Petroleum and Natural Gas Conservation Board which will hold their combined production to 40,000,000 cubic feet a day, the "available market demand."

First Move Since 1929

The action is the first gas conservation move to be taken in Turner Valley since 1929 and the first since the field became an important crude area. It was hailed by operators as an instrument to halt gas wastage which threatened to shorten the life of Turner Valley as a naturally flowing crude field. An excess of 200,000,000 cubic feet of gas was wasted daily, steadily lowering the pressure in the crude area.

An additional 90,000,000 cubic feet of gas a day will be produced by crude wells to lift the oil to the surface. Just what effect the board's order will have on operation of four absorption plants in Turner Valley was being studied by officials last week. Two of the plants are owned by the Royalite Oil Company, Limited, and one each by British American Oil Company, Limited, and Gas & Oil Products, Limited.

59 Percent Allowable

A new schedule of allowables for crude producers in the Turner Valley, made effective September 2, was established under the plan followed in United States fields and takes into account acreage drained, bottom hole pressure, gas/oil ratio and the rate of flow through the well tubing and a 2-inch orifice 12 inches long. The combined flow of crude wells was found to be about 48,000 barrels daily, and the total allowable, fixed in conformity with market demands, was set at 28,363 barrels, or about 59 percent of the combined flow.

Under the practice formerly in effect, a potential was established for each well at two-thirds of its unrestricted flow during a 24-hour period that followed 10 days of normal production. An allowable at 56 percent of such potentials was in effect at the time the new order was issued.

Fifty-three wells are listed as crude producers, six tests formerly in that classification having been designated gas wells because of the large quantity of gas they yield to produce a few barrels of oil.

Netherlands Indies crude production shows increase

Netherlands Indian crude oil production, which failed to show an increase for the first time in many years in the first quarter, showed a gain in the second quarter of 1938, total output during this period being 3.3 percent larger than in the previous period and 4.0 percent larger than in the corresponding three months of 1937, according to information received from Paul Hopper of the Bureau of Foreign and Domestic Commerce.

The gain noted in the second quarter of this year was largely for the account of the oil fields in the Palembang, Sumatra, region, the production of the latter increasing by 57,998.6 metric tons, or 9.1 percent, over January-March, 1938. The production of the Djambi, Java and North Sumatra oil fields also showed some gains, but that of the fields in Tarakan, East Borneo and Ceram showed losses of 5.8 percent, 1.6 percent and 5.0 percent, respectively.

Details concerning the crude oil production of the Netherlands Indies in the second quarter of 1938, with comparative data for the previous quarter and the corresponding period of 1937, follow:

Netherlands Indian Crude Oil Production (in Metric Tons)

OIL FIELDS	Second Quarter, 1937	First Quarter, 1938	Second Quarter, 1938
Java and Madura	245,249.3	251,199.4	259,108.7
North Sumatra	212,091.0	225,894.1	227,367.2
Palembang	681,983.4	638,324.6	696,313.2
Djambi	212,817.1	233,140.5	242,188.9
East Borneo	245,663.4	249,172.8	245,144.4
Tarakan	180,800.4	186,602.7	175,749.9
Boenjoe	83.2	.....	.....
Ceram	16,062.4	21,137.3	20,076.3
Total	1,794,583.8	1,805,471.4	1,865,948.6

Distribution of Netherlands Indies production among companies in 1937 was as follows: Royal Dutch Shell group, 4,089,829 metric tons; Standard Oil Company of New Jersey group, 2,166,152 tons; Netherlands Indian Petroleum Company, 1,006,074 tons.

Poland's proven reserves put at 7,000,000 tons

Known reserves of producible oil in proven fields of Poland are estimated by the Association of Polish Oil Engineers at 7,000,000 tons, about 49,000,000 barrels, or enough to last at the present rate of production until 1952. However, maintaining the present rate of production in Poland will call for constant drilling, it is said.

Shell gets 321,000-acre concession in Guatemala

Compania Guatemalteca de Petroleo "Shell" has been awarded an additional concession of 130,000 hectares by the Guatemalan government, the recent acquisition for exploratory work taking in that part of the Department of Izabal along the Atlantic coast between Honduras and British Honduras. It is equivalent to 321,000 acres.

In 1937, it will be remembered, the Shell organization petitioned the Guatemalan government for exploratory concessions on 7,600,000 acres, divided into seven sections and lying within certain parts of the Departments of Izabal and Alta Verapaz. It involved practically all the region of Peten, with the exception of a zone 15 miles wide following the border.

Preliminary work on the concession started near Guatemala City November 1, 1937, and geologists arrived on the scene a month later.

Alaska wildcat shuts down after showing favorably

Although prospects appeared bright several weeks ago that a new oil field would be discovered at Cook's Inlet on Iniskin Bay in Alaska by Iniskin Drilling Company, backed by Los Angeles and Hollywood interests, the wildcat, according to an official announcement last week, will be suspended due to approaching winter months, and work will not be resumed until April or May.

After exploring to 7100 feet and encountering oil and gas showings, Iniskin Drilling endeavored to swab in, but the company halted operations for fear of collapsing casing or running into other mechanical difficulties. Two members of the crew will stay at the camp while the remainder of the outfit will return to the States.

Tide Water Associated Oil Company, Standard Oil Company of California and Union Oil Company of California are jointly interested in attempting to develop Alaskan production, equipment having arrived for the first test.

Satisfactory reserves in Alaska would mean 2000 miles could be knocked off the tanker route to the Orient.

Iran production

Production of 754,000 tons in June brought Iran's total production for the first six months of the year up to 5,267,000 tons, according to figures received from W. D. Brown, American representative of Anglo Iranian Oil Company, Limited. May's production, according to Brown, was 908,000 tons.

New Iraq concession

Basrah Petroleum Company, a new $5,000,000 organization, has been granted a petroleum concession in the southern part of Iraq. The same interests owning Iraq Petroleum Company and Petroleum Concessions, Limited, are owners of the new concern.

Italy imports 437,529 tons of crude in second quarter

Italy's oil imports during the second quarter of 1938 consisted of 437,529 metric tons of crude oil, 90 tons of white oil lubricants, 12,778 tons of other lubricants, 7849 tons of kerosene, 23,356 tons of gasoline, and 776 tons of other mineral oils. In volume, considerably more than half of the grand total represented above was obtained from the United States, Italy's leading supplier of crude, white oil lubricants, and other lubricants during the second quarter.

On the export side of the ledger, Italy shipped out 336 tons of white oil lubricants, 2076 tons of other lubricants, 3158 tons of kerosene, 12,728 tons of gasoline, and 185 tons of other mineral oils. Austria was Italy's best customer, buying 1414 tons of kerosene and 8907 tons of gasoline.

The Italian import situation is shown in the accompanying table.

Despite strenuous efforts put forth by Italy to develop enough production to satisfy domestic needs, figures released by the Central Statistical Institute of Rome show a decided decline for the first six months of this year as against the first six months of 1937, the results being 6745 tons and 7618 tons, respectively. Domestic crude production in tons for the two periods are shown below by months:

	1938	1937
January	1124	1431
February	990	1241
March	1194	1355
April	1175	1199
May	1188	1240
June	1074	1152
Totals	6745	7618

Italy's Petroleum Imports[1]

Second Quarter of 1938

(Figures in Metric Tons)

Country of Origin	Crude Oil	Lubricants (White Oils)	Other Lubricants	Kerosene	Gasoline	Mineral Oils—Others
Albania	18,812	....	.....	.....	.....	....
Roumania	31,740	....	3,449	4,019	9,697	776
Iraq	34,863	....	.....	.....	.....	....
Dutch Indies	.....	....	.....	.....	2,379	....
Colombia	32,395	....	.....	.....	.....	....
United States	282,786	50	7,915	1,178	6,155	....
Russia	.....	....	790	65	9	....
France	.....	....	.....	150	.....	....
Iran	.....	....	.....	1,491	661	....
Other Insular Countries	.....	....	.....	853	4,105	....
Netherlands	.....	.....	.....	.....	172	....
Other Countries	36,933	40	624	83	178	....
Total	437,529	90	12,778	7,849	23,356	776

[1] Data compiled by Malcolm P. Hooper, acting commercial attache at Rome.

MEN IN THE INDUSTRY'S NEWS

CHESTER NARAMORE, NEW SECRETARY OF PETROLEUM DIVISION OF A.I.M.E., MAN OF INTERNATIONAL EXPERIENCE

W. A. WATKINS has been transferred to Mattoon, Illinois, by Carter Oil Company to become superintendent of the division created there last year. He takes the place left vacant when Rex L. Dawson was forced to take an extended leave of absence on account of ill health. Watkins has been superintendent of the central division of Carter Oil Company with headquarters at Seminole. He has been with the company three years, and previously was with Standard Oil Company of New Jersey in South America. Transfer of Watkins brought the central division under direction of R. W. Kirkpatrick, superintendent of the southern division at Wilson, Oklahoma. He will have charge of both divisions.

BERT FIELDS, oil operator of Dallas, after looking over the petroleum picture in the Illinois area, has returned to Texas. He is now in Midland.

EUGENE B. GERMANY, independent oil operator and mayor of Highland Park, Texas, has been elected chairman of the state executive committee of the Democratic party.

EDGAR E. TOWNES, vice president and general counsel of Humble Oil & Refining Company, Houston, has been named general chairman of the seventeenth annual campaign of the Houston Community Chest.

A. JACOBSEN, president of Amerada Petroleum Corporation, New York, headed a group of the company's officials in Houston last week for a business meeting. Those in the party were: A. R. Denison, chief geologist; J. F. Hosterman, assistant chief geologist; H. E. Marsh, in charge of land department; A. M. Blow, vice president; Dr. B. B. Weatherby, director; Andrew Gilmour, geophysicist; and Earl S. Porter. All the party were from Tulsa except A. Jacobsen.

F. C. SEALEY, formerly manager of production for The Texas Company of California, and prior to that division manager of South Texas production for The Texas Company, now is manager of the division of foreign production for The Texas Company, and is making headquarters in New York City. J. T. Wood has succeded Sealey as manager for production for The Texas Company of California.

W. P. LUSE, president of W. P. Luse Petroleum Company and Luse & Fosdick Drilling Company, accompanied by his wife, has just returned to Dallas after a two-month cruise to Australia, during which time they visited Honolulu, Pago Pago, Suva, Auckland, Sydney and Melbourne.

WALTER WELLS, president of Lane-Wells Company of California, sailed from Quebec for England September 12 on a business trip. He was accompanied by his family.

WILL DEVOTE MOST OF TIME TO TRAVEL IN OIL FIELDS

MINING and oil geologist, roughneck and scout, mining and petroleum engineer, oil company sales manager, acquirer and developer of foreign oil concessions—all those things rolled up in one man is Chester Naramore, recently appointed executive secretary of the petroleum division of the American Institute of Mining & Metallurgical Engineers.

Naramore, who likes to recall the days when "I got quite a reputation for being a cable tool fishing expert by just riding around with and listening to Carl Baker (Baker Oil Tools, Inc.) for about six months in the Coalinga district," is a native of Winnemucca, Nevada, but moved to California in early childhood, eventually graduating there from Stanford in 1903, majoring in geology and mining engineering. This was followed by 2½ years with the California State Mining Bureau as draftsman and field engineer. Then he took charge of the U. S. Geological Survey office at Denver, Colorado, visiting most of the mines in surrounding states. Three years later he transferred to San Francisco for a couple of years of similar work for the survey.

When the famous Lakeview gusher in California was running wild, Naramore had made his 1911 debut in the oil business as field geologist for Asociated Oil Company in the Midway-Sunset district.

Bachrach Photo

CHESTER NARAMORE

Later he took charge of W. P. Hammond's operations in Coalinga and Ventura County.

A list of contemporaries at Turner Valley's first boom, 1914, reveals Naramore on the payroll of the discovery company and of the Canadian Pacific Railroad, large holder of potential oil leases in Alberta at that time. Following this he returned to California to help R. P. McLaughlin organize the state inspection bureau, after which he joined the U. S. Bureau of Mines, eventually becoming chief of the Petroleum Division thereof. It was Naramore who organized the petroleum field station of the bureau at Bartlesville.

America's representative on the Inter-Allied Petroleum Conference in Rome, Paris and London during the World War was the A.I.M.E. Petroleum Division's new executive secretary. After the armistice, Naramore was European sales manager for Union Petroleum Company of Philadelphia, later taken over by Sinclair interests. Then he worked for Sinclair, acquiring foreign oil concessions in Europe, Africa, Siberia and China. One of these was the Sinclair concession on Saghalin Island, now produced by the Russians and Japanese. He resigned to develop production in Germany for an independent.

Since 1931 Naramore has been a consulting engineer in the United States.

J. L. McMAHON, manager of operations in North and West Texas and New Mexico for The Texas Company, is on leave of absence. He is returning to his home in Wichita Falls for the remainder of the year. McMahon's office will be under the direction of H. S. Cole, Jr., who is acting manager of the division, entering into that capacity with McMahon's departure.

M. M. KORNFELD, consulting geologist and paleontologist, was the principal speaker at the Houston Geological Society's first fall meeting at the Lamar Hotel, September 15. His subject was "An Illustrated Discussion of the Relation of Salt Dome Faulting to Oil and Gas Accumulation."

PAUL D. TORREY, geologist for Sloan & Zook Company, Houston, has been appointed chairman of the American Petroleum Institute's committee on secondary oil recovery, a subcommittee. Torrey is also chairman of the Petroleum Institute's Southwestern district topical committee on production practice.

I. H. HUGHES, who has been district engineer for Phillips Petroleum Company production department in the Panhandle, has been promoted to engineer in charge of electrical pumping equipment with headquarters at Bartlesville. He was formerly with Black, Sivalls & Bryson for several years in its Oklahoma City plant.

NATE CONDRY, superintendent for Cosmo Petroleum Company in South Louisiana, has been transferred to Refugio, Texas. He is being succeeded in his old job by J. J. Hooper who has been with Cosmo at Refugio and formerly was Gulf Coast superintendent for Sinclair.

G. M. STEARNS, FORMER CITIES SERVICE ENGINEER, WINNER OF JAMES F. LINCOLN FOUNDATION PETROLEUM AWARD

TWELVE OTHER AWARDS TO MEN IN THE OIL BUSINESS

G. M. STEARNS, who until September 1 was district production engineer for Cities Service Oil Company at Russell, Kansas, received the largest award for a paper from the oil industry in the $200,000 award program of the James F. Lincoln Arc Welding Foundation, Cleveland, Ohio. His paper was on "Arc Welded Well Casing." His award was $2543.88.

Effective September 1, Stearns became assistant professor of petroleum engineering at the University of Oklahoma and will continue school work toward a master's degree. Stearns, 27 years of age, majored in petroleum engineering at the University of Oklahoma and gained his bachelor of science degree in 1936. In February of that year he went to work with Cities Service Oil Company as production engineer. He is a member of the Tau Beta Pi and Sigma Gamma Epsilon fraternities.

Altogether, 382 awards were made by the Foundation. The amounts ranged from $101.75 for honorable mention to $13,941.33 for the Grand Award.

Awards in the Petroleum Machinery Division follow:

An award of $712.28 went jointly to John F. Muller and G. C. Munoz, power transmission engineer and general manager, respectively, American Pulley Company, Philadelphia, Pennsylvania, on their paper, "Oil Pump Motor Base."

Award of $508.77 was received jointly by Phillip S. Ball and Justus O'Reilly, draftsman and assistant engineer, respectively, Skelly Oil Company, El Dorado, Kansas. Their paper was "Arc Welded Trays for High-Pressure Bubble Tower."

S. Wm. Riley and George Heinish, design engineer and chief engineer, respectively, of Star Drilling Machine Company, Akron, Ohio, won $305.26 for a paper on "Arc Welding Advances the Art of Well Drilling," which described a portable spudder drilling machine.

Award of $203.51 went to A. M. Elder, engineer maintenance department, Gulf Refining Company, Toledo, Ohio, for his paper, "Redesign of Coking Still Shell by Arc Welding."

An award of $152.63 was won jointly by G. W. Woods and R. S. Grant, engineers, Hughes Tool Company, Houston, Texas. Their paper was "Arc Welding Tool Joints Directly to Drill Pipe."

Honorable mention awards of $101.75 went to the following authors of papers on design of oil industry equipment: Fred C. King, Jr., draftsman, The National Supply Company, Torrance, California; L. W. Mosley, owner, Baker Oil Company, Huntington Park, California; R. H. Biggs, Midland, Texas; Joseph W. Gasper, designer, Maine Machine Works, Ltd., Gardena, California; jointly to W. C. Russell and L. W. Stahl, superintendent structural division, and chief engineer, mechanical division, Emsco Derrick & Equipment Company, Los Angeles, California, and Houston, Texas; and R. E. Hughes, district foreman, Standard Oil Company of Louisiana, Oxford, Louisiana.

G. M. STEARNS

O. L. REINECKE, Claresholm, Alberta, has been named president of Anaconda Oil Company, Ltd., Alberta producing company, succeeding A. C. Johnson, who asked that he be relieved of his duties as an officer of the company. Other officers are W. B. Fraser, Calgary, vice president, and A. J. Scott, Calgary, managing director and secretary-treasurer.

A. A. HOLSTON is in charge of the geological department, and Charles Goodson, of the land department of the new Shreveport, Louisiana, office of Stanolind Oil & Gas Company. A suite of offices has been opened in the Ricou-Brewster Building. Several clerks were transferred to Shreveport from the Tyler, Texas, office.

BART DOLAST, formerly with Gulf Oil Corporation, is now in charge of the engineering department of The Pure Oil Company in Illinois.

FRANK LINGAFELTER and Burr Williams have launched activity as Illinois drilling contractors. Lingafelter formerly was with Ohio Oil Company at Tulsa, where he served in the capacity of superintendent.

JOE L. MURPHY, John P. Wham and Noast Lee Murphy last week organized Joe L. Murphy Drilling Company which will operate from headquarters at Centralia, Illinois.

R. H. BRECKON, president of Vera Oilfields, Ltd., Saskatoon, Saskatchewan, was in Calgary, Alberta, last week. Breckon pioneered in Alberta's Turner Valley field with Mill City Oils, Ltd., and later brought in the B. & H. discovery well in Montana's Cut Bank field.

SHERMAN HALL, Evelyn Wells and Mrs. Cora Wells, all of Owensboro, last week organized Hall Drilling Company as a $10,000 Kentucky corporation.

S. J. HUNGERFORD, chairman and president of Canadian National Railways and president of Trans-Canada Air Lines, on his return to Montreal last week from a western trip, declared he was impressed by development in Alberta's Turner Valley field.

A. B. POTTER is president and W. H. Swanson is secretary of Cumberland Production Company which was admitted to do business in Illinois last week. The company will maintain its state headquarters in Centralia.

CHESTER D. WHORTON, chief geologist and production superintendent of Godfrey L. Cabot, Inc., Olean, New York, accompanied by Mrs. Whorton and friends, is vacationing in Bermuda.

DIED:

MAX FUHRMAN, 42, of Okmulgee, Oklahoma, died September 14 of injuries received when he jumped from a tenth floor hotel window in San Francisco, California. He was a director of Fuhrman Petroleum Corporation of Midland, Texas.

GORDON TOWLES, driller of Wichita Falls, was fatally injured when a derrick in the Kilgore area of East Texas collapsed during a cementing operation. R. L. Pearson, Joinerville, and G. R. Boulware suffered minor injuries in the accident.

Interstate commission to renew compact in Tulsa

A report covering renewal of the Interstate Compact Commission, which expires next year, will be prepared in a meeting scheduled at 10 a.m. in the Mayo Hotel, Tulsa, September 29, according to Art L. Walker, secretary of the commission. Preparation of the report will be made by the special committee appointed under resolution by Judge E. R. Sloan of the Kansas Corporation Commission at the Colorado Springs meeting of the Interstate body.

Walker advises that several other important matters will come before the September 29 meeting of the commission.

Members of the Interstate Compact Commission are: Colonel Ernest O. Thompson of Texas, chairman; Hiram M. Dow of New Mexico, first vice chairman; William L. Bell of Illinois, second vice chairman; Art L. Walker, secretary; and Warwick M. Downing of Colorado, Ernest E. Blincoe of Kansas, and Governor E. W. Marland and Tom Anglin of Oklahoma.

Manufactured gas will be replaced at Estherville, Iowa, with Butane gas shipped from Southwestern fields in tank cars. A reduction in rates is expected to follow the change.

THE WEEK'S NEWS SUMMARIZED

Courts

When retrial of 3 major oil companies and 15 oil company executives on charges of violating the anti-trust laws takes place there will be a new judge on the bench. Judge Patrick Stone, who heard the first case and granted the retrials, will be occupied for four months. Therefore, Judge Walter Lindley will preside. Judge Lindley signed the bankruptcy orders against the huge Insull corporations. It will be impossible for the trial to get started as scheduled on September 26, as Judge Lindley will not confer with attorneys in the case until October 10 regarding a starting date.

Ruling of a Dauphin County court that Pennsylvania gasoline dealers may give discounts from the posted price is believed to open the way for a price-slashing war in the state. The decision apparently means that posted prices will mean nothing.

Capitals

Elimination of oil from the proposed reciprocal trade agreement with Venezuela was urged by United States Senator Sheppard last week on the grounds any reduction in present excise taxes would infringe upon the rights of Congress tying its hands, would possibly destroy the petroleum industry when it is most needed, and would provide an opportunity for Mexico to dump cheap oil taken from American companies through expropriation.

Disposition of pipe line overages was a question before the Texas Railroad Commission last week. Several pipe line company officials testified at a meeting that they accumulated more oil than is tendered and more than is provided for in Railroad Commission allowables. Because such overages have been charged against East Texas allowables and not in other fields, discrimination against East Texas operators was alleged by a group that brought about the meeting. Most operators were of the opinion overages could not be avoided.

An extensive study of Wyoming's natural resources for the purpose of drafting protective legislation and stimulating state industry and employment has been undertaken. Eight members are to be named to a committee.

Markets

Despite some instances of lower gasoline prices and a 15-cent cut in Smackover crude, oil industry markets continue to look generally favorable. Apparently the further reduction of Mid-Continent tank car gasoline prices further reflected the excessive gasoline stocks, still 6 percent higher than last year. Moreover, 300,000 barrels were added to storage during the week ended September 10.

Crude production remains drastically curtailed, and continues to drop in accordance. It is now about 12 percent under last year's curve and substantially under current demand. Consequently, oil stocks are being reduced, and have dropped to a 15-year low.

However, refinery runs of crude have not been curtailed, which is causing the addition to gasoline stocks.

Fuel oil inventories also are comparatively large, and continue upward. They rose last week 1,500,000 barrels, and are 30 percent greater than one year before. Meanwhile, fuel demand is lagging behind last year's levels.

Pipe Line

Permission is being sought to build the largest pipe line project since 1931. Western Kansas Gas & Pipe Line Company desires to construct a 1040-mile trunk system from the Hugoton, Kansas, gas field to northern Minnesota. Lateral lines totaling 1306 miles would serve 129 towns. The concern has made application to the Federal Power Commission, and has asked the Reconstruction Finance Corporation for a $20,000,000 loan.

A proposal to build an oil outlet for the K-M-A field gained momentum last week, when Hope Engineering Company agreed to build an 8 or 10-inch line and pay the posted price if the operators would contract 10,000 acres and 300 wells in 5 years time. They would have a capacity ranging from 10,000 to 24,000 barrels daily.

German capital last week proposed that they provide the Turner Valley field of Canada with a needed pipe line outlet by construction of a 1000-mile system. It is supposed that the oil would be exported to Germany in event the line is built.

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Oil at the Capitals

Sheppard sees disastrous results if oil included in Venezuela reciprocal trade treaty . . . Texas commission studying pipe line overage problem

Elimination of oil from Venezuela trade treaty urged

Abandonment by the state department of any plans it may have to reduce the excise taxes on oil in negotiating the proposed reciprocal trade agreement with Venezuela was demanded September 16 by Senator Morris Sheppard of Texas, who intimated that such a reduction would be an infringement upon the rights of Congress, would also possibly lead to the destruction of an industry essential to the national defense at a time when the world was on the brink of war and provide an opportunity for Mexico to dump in this country the oil taken from American companies through expropriation.

In one of the sharpest criticisms of the proposal yet voiced, the senator warned the committee that many factors other than a mere trade concession to a friendly country were involved by implication in the scheme to reduce the excise taxes.

These taxes, he pointed out, were provided by Congress as part of its program of petroleum conservation, and that body should not be hampered in furthering protection of a natural resource, particularly at a time of international tension which may result in an emergency in which oil would play a major part in the national defense.

"The Congress of the United States realizes the important part played by these excise taxes in maintaining that sound conservation program to which the various oil-producing states are committed," he told the committee. "It originally adopted these taxes in order to prevent unlimited quantities of foreign oil from selling so far below the production cost of domestic oil that our home markets would be demoralized. It has renewed these taxes on the expiration of each of the two-year periods for which they were levied.

"By doing so it has placed each successive Congress in the position of being able to increase these taxes whenever the domestic petroleum situation might seem to demand it. Should these excise taxes be included in the proposed agreement with Venezuela, the Congress of the United States would be unable to increase these taxes no matter how desirable that increase might be from the standpoint of the welfare of American industry and finance."

The excise taxes, Senator Sheppard explained, have been a major factor in keeping imports below the point at which they would wreck the American industry and, he warned, "should the hands of the Congress be tied in this matter by the trade agreement, then the sole barrier to unlimited importations would be removed."

Surveying the current situation in the oil industry, the senator explained that it is extremely sensitive to every influence, and that during the week ended August 29, last, when there was imported into Houston, Texas, from Tampico, Mexico, 79,095 barrels of gasoline and 99,994 barrels of crude oil, "the immediate effect of such an importation was to create a price war which is having a very serious effect not only in Houston but in other parts of Texas." Even after paying the excise taxes, he pointed out, these imports could be offered at lower prices than domestic products in Texas markets.

Further, the committee was told, "the petroleum industry will be an important factor in the national defense should we be forced into war.

"If foreign oil, produced cheaply because of lower labor costs and lower tax burdens, should make it uneconomic to operate our domestic production of petroleum, then many fields and pools of oil in this country would be closed down. Recognized authorities declare that should this happen many of these fields and pools would be utterly lost and recovery of the oil they contained be either impossible or too costly for consideration. That would make us dependent upon other nations for much of our supply of petroleum in a national emergency in spite of the fact that today we have available sufficient oil in developed territories to meet all our needs."

Senator Sheppard also pointed out that the granting of a concession on oil to Venezuela would be of aid to Mexico under the government's policy of extending the benefits of trade agreements to all countries on the most-favored-nation basis, thus, he warned, "in view of the expropriation of American oil interests in Mexico, we might expect that this neighbor would naturally seek to dump this expropriated oil in our own markets, which are not only the nearest but the best."

Any concession on oil made to Venezuela will benefit a half-dozen American companies rather than either the Venezuelan government or Venezuelan citizens, he declared.

"Because of the close relationship between the health of the domestic petroleum industry and all other industries in this country and because of the necessity of preventing an over supply of foreign petroleum," he concluded, "I urge that petroleum and its products be omitted from the negotiations of a Venezuelan trade agreement, in order that Congress, as it has done in the past, may be able to take action on the excise taxes, to increase them or decrease them, as the situation in this country may require."

Texas commission probes pipe line overage oil

Disposition of pipe line overages in Texas was considered last week at a hearing before the Texas Railroad Commission. Officials of several of the larger pipe line companies appeared before the commission and testified that they accumulated more oil than is tendered and more than is provided for in Railroad Commission allowables. While the accumulation over a period of years amounted to hundreds of thousands of barrels, it usually represented less than 1 percent of the total allowable oil.

The hearing was called in response to a request from Judge Renne Allred, brother of the governor, who alleged that such overages in East Texas were charged back against the allowable, while in other parts of the state outside of the Corpus Christi area, special permits were issued allowing the oil to be disposed of in the usual commercial channels. Allred charged that this was discrimination against East Texas operators and operators of small pipe lines whose production, because of the limited sources of supply, could be traced back to the leases from which it came.

In statewide operations such accumulations cannot be traced to their sources, and for that reason it is virutally impossible to charge them back. It is for this reason that the commission usually permits the oil to be moved rather than ordering it to be burned or allowing it to deteriorate in storage.

Most operators who attended the hearing were of the opinion that because gaugers are careful to be sure that they get full measure, it is impossible to avoid overages.

It is likely that the commission will issue some new regulation attempting to provide for closer compliance with allowables fixed, but another hearing will be held before final action is taken.

Wyoming to study use of natural resources

With direct reference to the oil industry, Governor Leslie A. Miller of Wyoming last week announced an extensive study of the state's natural resources for the purpose of drafting legislation and revealing ways and means of stimulating industry and employment.

The governor hit movement of raw materials from the state for processing, a subject that has been in the labor and political spotlight since announcement of Continental Oil Company's $2,000,000 crude oil pipe line from the Lance Creek field of Wyoming to the company's Denver refinery. Labor groups are talking circulation of a petition requesting enactment of legislation to lay a heavy tax on oil piped outside the state for processing in order to discourage completion of the line.

"As it now stands, Wyoming is losing much of the benefits from its natural resources which are being taken outside the state for processing," Governor Miller said. "The committee which I will name will make a thorough, non-political study of our resources to determine whether anything can be done by the state legislature to control them. The purpose of this study

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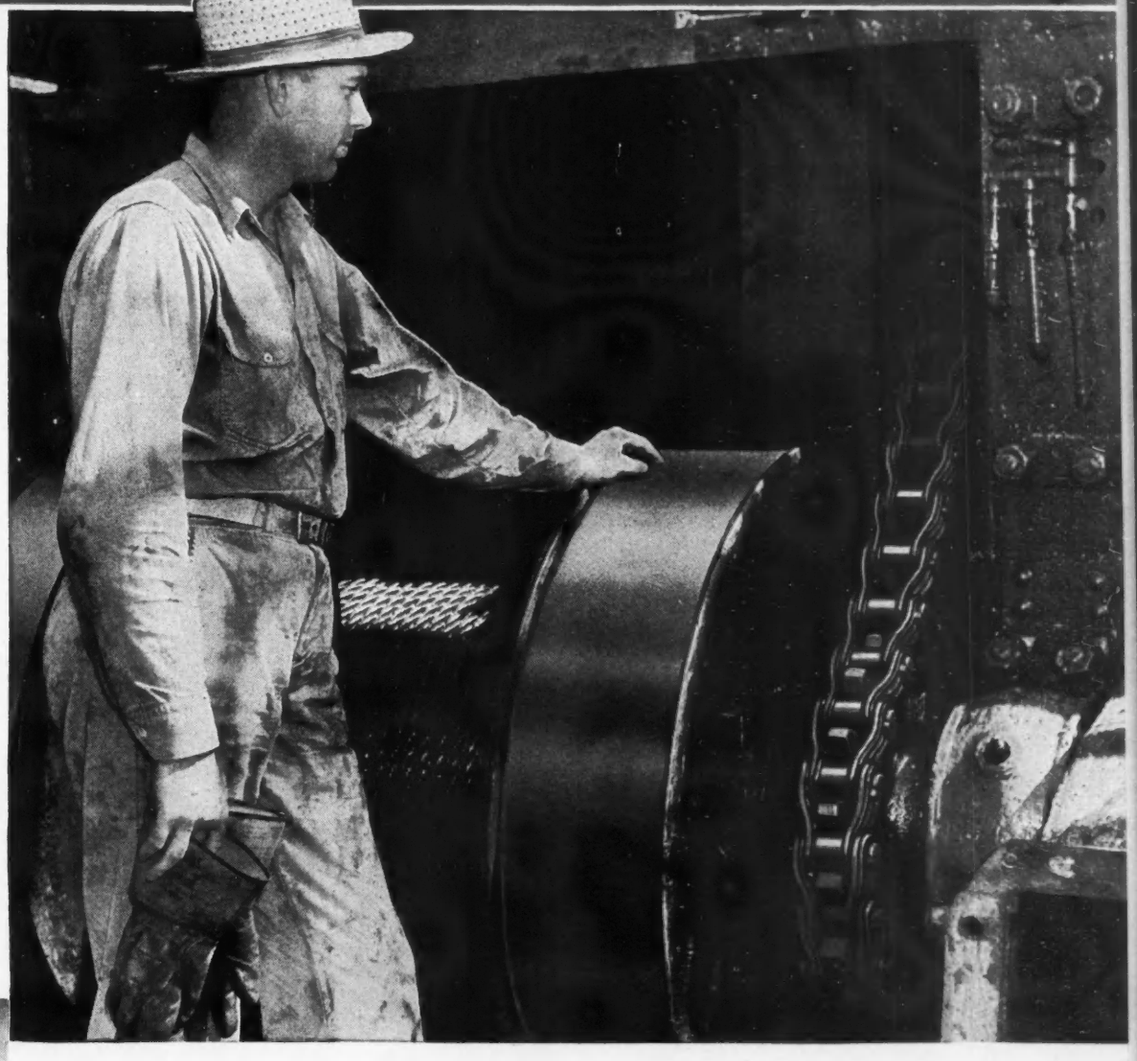

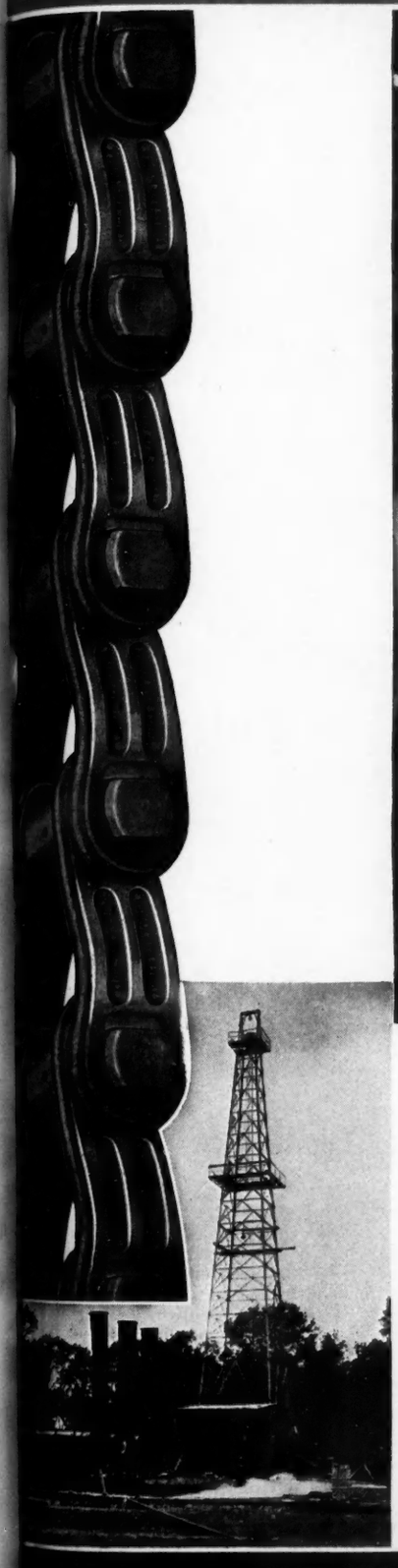

Lloyd Carter, like most other drillers, takes his chains seriously. And he takes LINK-BELT HYPER every time, because, to him: "HYPER runs on, well after well, without trouble, and there seems to be no wearing out to it."

This rig, equipped 100% with LINK-BELT 3-bar and SS-40 HYPER, as shown here, had just finished and was preparing to move off the fourth 6850′ well at Fairbanks, Texas (pictured at left). Previously it drilled four 5880′ wells at Amelia, Texas, and did two work-over jobs there, all with the same HYPER Chains, which are still in excellent condition. Thousands of other key men are getting this same fine performance from the *"Tops In Oil Field Chains,"* and these thousands will agree with Lloyd Carter on his chain preference.

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is to have a survey in the state and to bring about employment of Wyoming men and women."

Eight members will be named to the committee, which will begin its work as soon as members accept appointment, he explained. Following the November 8 election, several legislators will be asked to sit in with the committee and prepare special information for the legislature. A full report is to be made to the legislature in January with possible recommendations as to what steps can be taken to protect the state's resources and find new fields for industry and labor.

Before announcement of the survey, approval was given the plan by the Democratic state central committee meeting in Casper. The Republican committee has also endorsed a plan for changes in Wyoming laws to protect state workmen following protests on the pipe line project by labor groups.

Arkansas launches exhaustive oil survey

The Arkansas Board of Conservation last week launched what was described as the first complete oil and gas field survey ever attempted in that state with questionnaires to operators seeking basic information. Efforts will be made to complete the survey by October 15 so that publication may be made in December.

The questionnaires, return of which is sought by October 1, ask each operator the number of leases and wells operated, volume of oil, gas and water produced, disposal of gas, gravity, proven acres, and the estimates of the number of barrels of recoverable oil remaining under the producing and proven acreage. Other data requested pertains to the cost of drilling and completing wells, loss sustained in drilling dry holes, average cost of placing wells on the pump or gas lift, number of wells drilled during 1937 and number contemplated in 1938, number abandoned in 1937 and number contemplated abandoning in 1938, number of wells acquired or sold in 1937, classification of leases according to daily oil production, and a complete list of expenses, production and value of oil produced in 1937.

Information given on economic subjects will be regarded by the board as confidential, said A. M. Crowell, chief agent for the board.

Pipe Line News

Seek right to build 2300-mile gas system across United States . . . Germans propose a 1000-mile Canadian line . . . K-M-A to Coast project slated

Seek permission to build 2300-mile gas system

Permission for building a natural gas line from the Hugoton field, Western Kansas, to the northern shore of Minnesota has been sent to the Federal Power Commission by the Western Kansas Gas & Pipe Line Company. The concern is seeking a loan of $20,000,000 from the Reconstruction Finance Corporation for building the line.

The project includes 1040 miles of main trunk line and 1306 miles of lateral lines which would serve 129 towns and communities in Kansas, Nebraska, South Dakota, North Dakota and Minnesota. Northern terminus of the line would be in the Mesba and Cuyuna iron ranges.

K-M-A to Coast pipe line is a step nearer

The proposal to build an oil pipe line from the K-M-A field of North Texas to a point on the Gulf Coast was a step nearer following a meeting of operators and other interested parties in Wichita Falls last week.

Hope Engineering Company agreed to construct either an 8 or 10-inch line and pay the posted crude price, if operators would allocate a stipulated volume of production. The company asked that 300 wells and 10,000 acres be contracted to the company within five years. At the meeting 8062 acres and 161 oil wells were pledged. The line would have a minimum capacity of 10,000 barrels and a maximum of 24,000 barrels daily, and would give K-M-A a much needed market.

More than 75 operators attended the meeting. D. H. Bolin, president of the Wichita Falls Chamber of Commerce and operator in the field, presided at the meeting. B. E. Hepler, president of the Hope Company, was present.

German firm offers to build 1000-mile Canadian line

Tropicorp, a German firm with headquarters in Berlin, has offered to construct a 1000-mile line from Calgary, Alberta, to Vancouver, British Columbia, and to take Canadian oil in payment therefor, according to the Canadian press of September 14. It is estimated such a line would cost $16,000,000.

Any action taken on the offer will come only after discussion with Canadian and British government authorities, according to R. A. Brown, Sr., chairman of the Alberta Petroleum Association.

Start construction of station on Continental line

Construction of a delivery station to divert 1500 barrels of oil daily from Continental Oil Company's $2,000,000 pipe line running from the Lance Creek field of Wyoming to Denver, for processing at the Bay Refining Company plant in Cheyenne, has been started. The station will permit diversion of 20 percent of the oil transported by the pipe line for processing in Wyoming, it was announced at the Cheyenne office of the Rocky Mountain Pipe Line Company, which has the contract for the project.

Progressing satisfactorily, pipe on the Cheyenne-Denver leg of the line has been laid 25 miles southward from Cheyenne to a point 15 miles in Colorado, and ditch for the pipe has been dug about 13 miles farther. The pipe is to be extended to a point about 38 miles south of Cheyenne, at which time workmen will start construction 24 miles farther south and extend the line into Denver. The middle section will be laid at the close of the crop season.

Eighteen-mile pipe line approved for Arkansas

The Arkansas Utilities Commission on September 12 approved an application of Arkansas-Oklahoma Gas Company for authority to build an 18-mile transmission line connecting the company's wells with a pipe line near Vesta, Franklin County. Cost of the project is estimated at $85,000.

Labor Situation

National Labor Board suggests Continental withdraw its recognition of employees' federation

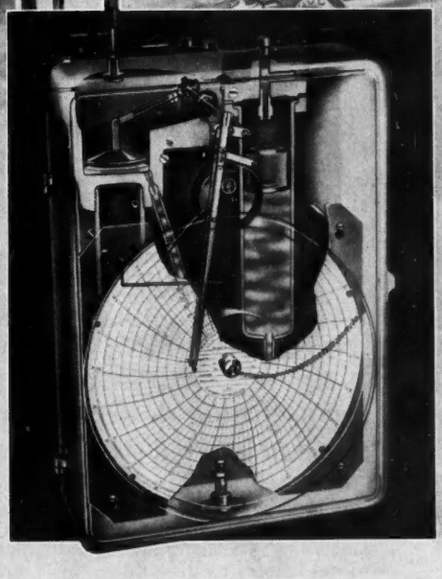
The National Labor Relations Board examiner who heard a complaint against Continental Oil Company, Ponca City, Oklahoma, has recommended the company withdraw all recognition from the employees' union in the Ponca City area.

The recommendation was made by E. R. Strempel, who conducted a hearing from June 13 to June 21, after a complaint had been based on charges brought by the Oil Workers International Union's local chapter. The examiner recommended the company post a notice that it will desist from interference with the employees right to organize and that it is withdrawing recognition of the company union.

The company won on one point in the charge. It had been alleged that a workman had been discharged because of union activity. The examiner held that the man's discharge was "for cause."

—and

Oklahoma



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Market Situation

Mid-Continent gasoline prices drop again . . . Smackover crude cut 15 cents . . . Refined oil stocks continue to rise while crude is reduced

Markets being bolstered by moderate operations

The market outlook continues generally favorable, despite some further weakening of gasoline prices last week and the local crude price cut of 15 cents a barrel at Smackover field, Arkansas.

The further decline of gasoline tank car prices in the Mid-Continent apparently reflected the still excessive gasoline inventories, which are about 6 percent larger than at this time last year, while consumption has been running only about the same.

Furthermore, gasoline production has been larger than desirable, as evidenced by the addition of about 300,000 barrels of gasoline to storage in the week ended September 10. Normally, the industry continues to withdraw gasoline from storage until later in September, before beginning the fall and winter additions.

The crude cut at Smackover was described as resulting from a local situation, in which the field's production was increasingly competitive with the output of other fields.

Despite the various difficulties currently being experienced, however, the markets are being strongly bolstered by the prevailing drastic curtailment of crude oil production, under September allowables. The national production now is exceptionally low, being about 12 percent under last year's curve and substantially under current market demand. Consequently, further withdrawals have been made from crude oil storage, which is at the lowest level for 15 years.

However, refinery runs of crude oil have not been so sharply curtailed, and output of refined products has been sufficiently large to result in additions to the stocks of fuel oil and of gasoline.

In view of the strict curtailment of crude production, however, it is indicated that refinery operations may be more moderate during the remainder of this month, and that the inventory situation of finished products may be improved.

Reopened Ardmore plant to take Healdton crude

Effective October 12, Pure Oil Company will cease to purchase oil in the Healdton pool and turn its connections over to Ben Franklin Refining Company of Ardmore. This concern is now reconditioning the refining plant of Wirt Franklin Petroleum Corporation. It has bought the pipe line facilities of both Pure Oil Company and Coline Oil Company.

Pure Oil Company reduced its Healdton purchases by 40 percent August 1, but resumed 100 percent purchases pending entry of the Ben Franklin Refining Company as a user of crude oil in Southern Oklahoma fields.

Current operations and stocks satisfactory

The industry is holding current operations, at wells and refineries, at relatively low levels, and inventories of oil above ground remain at fairly satisfactory levels. Crude oil stocks are unusually low, but gasoline storage is still larger than desirable, while fuel oil inventories also are comparatively large.

The American Petroleum Institute reported that United States crude oil production declined about 150,000 barrels in the week ended September 10 to a daily average of 3,206,900 barrels, as the Saturday shutdowns in Texas (added to the Sunday closings) were reflected. The production at the reduced level was about 12 percent lower than in the corresponding week last year.

Crude oil runs to stills, in contrast, were up 40,000 barrels in the same week, having averaged 3,235,000 barrels daily. The runs were, however, 6.4 percent lower than in the comparable week last year.

Crude oil stocks came down 110,000 barrels more in the week ended September 3, and at the new level of 284,919,000 barrels were 8.2 percent lower than one year previously and at a new low for the past 15 years. Another decline was in prospect, moreover, for the week of September 10, in view of the increase of refinery runs

Oil in the Courts

Judge Lindley succeeds Judge Stone in retrial of anti-trust suits . . . Restraining order is issued in suit against East Texas exceptions to spacing

Different judge to hear Madison trust retrials

Federal Judge Patrick T. Stone announced at Madison last week that he would not be able to conduct the retrial of three major oil companies and 15 oil company executives scheduled to open at the Wisconsin capitol on September 26. Judge Stone, who granted a defense retrial motion after a jury found the defendants, along with other companies and individuals, guilty of violating the Sherman anti-trust law in operation of buying programs in the East Texas and Mid-Continent fields, will be occupied with jury trials in western Wisconsin for the next four months.

District Judge Walter C. Lindley, of the federal court at Danville, Illinois, will preside during the retrial, and will come to Madison October 14 to meet with defense counsel and government attorneys to set a trial date.

Pending before Judge Stone is a motion growing out of the first trial held in Madison last winter by which government attorneys seek to set aside his ruling dismissing the jury verdict as against one company and 10 individuals, while pending before the U. S. Circuit Court of Appeals at Chicago is a defense appeal from Judge Stone's ruling sustaining the jury verdict of guilty as against 12 companies and 5 individuals.

Judge Lindley, who was assigned by Evan A. Evans, presiding judge of the seventh federal circuit, is the judge who signed the bankruptcy orders against the huge Insull corporations. He was a leading attorney in Danville when President Harding appointed him to the federal bench in 1922 at the request of "Uncle Joe" Cannon, then speaker of the house of representatives.

Restrain East Texas spacing exception drilling

A temporary order restraining Shelby Oil & Gas Company and Lewis Production Company from drilling wells Numbers 10, 11 and 12, on the 40-acre Pegues lease of the George Cooper Survey, Rusk County, East Texas, has been issued as a result of a petition by Gulf Oil Corporation. The wells were in exception to Rule 37. Hearing is for September 26.

Pennsylvania dealers given right to grant discounts

Believed to open the way for a price-slashing war, a decision was handed down by the Dauphin County Court last week permitting Pennsylvania gasoline dealers to give discounts from the posted price. A section of the gasoline dealers licensing act which prohibited discounts was declared unconstitutional.

The provision in the act of the 1937 legislature was ruled by Judge Karl E. Richards to deprive dealers of their property without due process of law and to impair the obligation for contract. He also ruled that the act, placing dealers under state license, was "severable" and that the decision did not apply to provisions covering fraud and deception and placing a tax of $1 a year on each gasoline pump in the state.

Commenting on the decision, an official of the Atlantic Refining Company said: "The posted price may mean nothing from now on. It is anybody's guess what will happen. It will mean a return to the old evils, when dealers posted one price and then really sold gasoline for another price."

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Fort Worth—Houston—Corpus Christi—Kilgore.

HILLMAN-KELLEY, INC.
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Los Angeles, Calif.

KIMBELL-BOSTIC COMPANY, INC.
Burkburnett, Texas.

THE B. LEVY ESTATE
Titusville, Pa.

MURRAY-BROOKS HARDWARE CO., LTD.
Lake Charles, La.
Houma—Jennings—New Iberia.

NORVELL-WILDER SUPPLY COMPANY
Beaumont—Corpus Christi—Fort Worth—Houston—Monahans, Tex.—Lake Charles, La.

PARKERSBURG SUPPLY COMPANY
Parkersburg, W. Va.

THE ALMA PIPE AND SUPPLY CORP.
Alma, Mich.

UNION PIPE AND SUPPLY CO., INC.
Owensboro, Ky.

UNITED PIPE AND SUPPLY CORP.
Charleston, W. Va.—Paintsville, Ky.

UNITED SUPPLY & MANUFACTURING CO.
Tulsa—Oklahoma City—Stonewall—Chase, Kan.—Hutchinson, Kan.—Houston, Tex. Odessa, Tex.—Pampa, Tex.—Eunice, N. M.

WESTERN MACHINERY COMPANY
Clay City, Illinois.

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CONTINENTAL EMSCO COMPANY, INC.,
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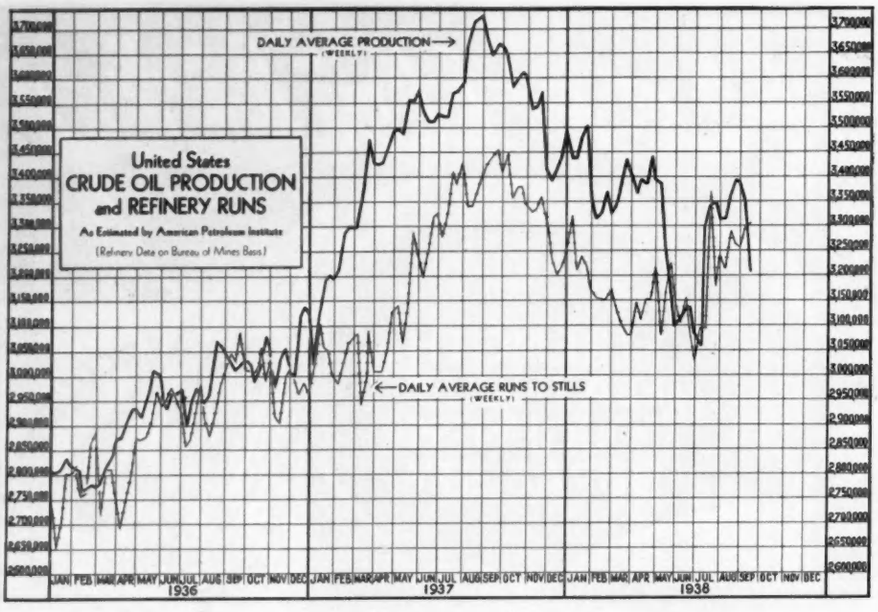
NEW YORK CHICAGO DENVER PORTLAND SAN FRANCISCO SEATTLE



in the face of a sharp curtailment of crude oil production.

The formerly declining trend of gasoline storage was halted in the week of September 10, and the stocks rose about 350,000 barrels, to 70,860,000 barrels. They were then 6.6 percent larger than one year previously, when the gasoline storage amounted to 66,456,000 barrels.

The gasoline stocks still are larger than justified by consumption, which has been running only about the same this year as last.

Fuel oil stocks were increased about 1,500,000 barrels in the week ended September 10, having jumped to 149,104,000 barrels. At that level they were 30 percent larger than one year before, although fuel oil demand has been lagging materially below last year's levels.

Smackover crude cut; gasoline prices off

Prices in the industry underwent some further marking down during the past week. Among the reductions were the 15-cent cut in Smackover, Arkansas, crude and the further declines of ⅛-cent a gallon in gasoline tank car prices in the Mid-Continent.

On the other hand, quotations were slightly higher on some grades of fuel oil.

Effective September 15, Standard Oil Company of Louisiana reduced the price of Smackover, Arkansas, crude 15 cents to a new posting of 75 cents a barrel. The company has been buying about 2300 barrels of this oil daily, and has 650 barrels daily of its own production.

Natural Gasoline

Natural gasoline, grade 26-70, was priced generally in the Mid-Continent markets f.o.b. refineries at 3¼ cents a gallon, and sales were reported at the same price f.o.b. Breckenridge, Texas.

Gasoline at Refineries

U. S. motor gasoline ranged in the Oklahoma market last week about as follows: 62 octane and below 4⅜ to 5 cents a gallon; 63 to 66 octane, 4⅝ to 5⅛ cents; 67 to 69 octane, 4⅞ to 5¼ cents; 70 to 72 octane, 5⅛ to 5¾ cents.

Corresponding prices in the Chicago markets were 4 to 4¾ cents, 4⅜ to 4⅞ cents, 4½ to 5¼ cents and 4⅝ to 5⅜ cents.

In East Texas the most common gasoline, 60-62, 400 end point was priced generally from 4½ to 4⅝ cents a gallon.

Kerosene prices f.o.b. Oklahoma refineries ranged from 4 to 4¼ cents a gallon for the 41-43 water white grade, and from 4¼ to 4⅝ cents for the 42-44 water white grade; and corresponding prices in the Chicago market were 3⅝ to 4¼ cents and 3⅝ to 4⅜ cents.

Fuel Oil

Fuel oil prices were not materially changed in the past week. In the Chicago market range oil was priced from 3⅝ to 4 cents a gallon. The No. 1 white oil was priced from 3⅝ to 3⅞ cents, and No. 1 straw from 3½ to 3¾ cents. No. 2 straw was 3½ to 3⅝ cents. No. 3 oil was 3¼ to 3⅜ cents. No. 5 oils were 60 to 72½ cents a barrel. The No. 6 oil was quoted at 35 to 50 cents a barrel.

Trends of United States Production and Stocks

Figures are from American Petroleum Institute weekly reports, except those on crude stocks, which are from Bureau of Mines weekly reports

WEEK ENDED	Crude Oil Production (Barrels Daily)	Crude Runs to Stills (Barrels Daily)	Crude Oil Stocks (Barrels)	Gasoline Stocks (Barrels)	Gas & Fuel Oil Stocks (Barrels)
August 29, 1937	*3,731,450	3,425,000	309,506,000	66,997,000	112,111,000
September 25	3,666,300	*3,455,000	307,974,000	65,620,000	116,472,000
October 2	3,647,450	3,400,000	309,036,000	65,266,000	117,076,000
October 30	3,602,950	3,345,000	307,140,000	66,836,000	121,070,000
November 27	3,425,800	3,325,000	304,156,000	68,544,000	121,616,000
December 25	3,492,600	3,245,000	303,294,000	74,437,000	118,659,000
January 1, 1938	3,436,600	3,320,000	303,468,000	77,291,000	118,660,000
January 29	3,357,650	3,170,000	304,286,000	84,844,000	118,793,000
February 26	3,322,800	3,170,000	305,167,000	90,719,000	120,958,000
March 19	3,322,550	3,080,000	306,380,000	*93,192,000	122,067,000
March 26	3,405,600	3,080,000	307,557,000	92,858,000	122,979,000
April 30	3,396,150	3,215,000	307,147,000	91,339,000	128,270,000
May 28	3,098,650	3,150,000	301,583,000	87,946,000	134,315,000
June 25	3,083,900	3,025,000	293,463,000	82,412,000	137,801,000
July 30	3,316,400	3,240,000	288,514,000	76,864,000	144,294,000
August 6	3,317,850	3,215,000	287,406,000	75,380,000	144,699,000
August 13	3,359,900	3,295,000	286,251,000	74,387,000	146,261,000
August 20	3,392,700	3,265,000	285,137,000	72,709,000	147,180,000
August 27	3,388,500	3,255,000	285,029,000	71,754,000	146,926,000
September 3	3,349,100	3,195,000	284,919,000	70,514,000	147,646,000
September 10, 1938	3,206,900	3,235,000	.....	70,860,000	149,104,000
September 11, 1937	3,642,400	3,455,000	†310,417,000	66,456,000	114,666,000
Change in past year	—11.9%	—6.4%	—8.2%	+6.6%	+30.0%

* All time peak. † Stocks, September 4, 1938.

Pipe line proration applied to Lisbon

Caddo Crude Oil Purchasing Company (M. J. Grogan) has notified producers at Lisbon that retroactive to September 1 it will purchase only 60 percent of the allowable from the field which for September is 9000 barrels. This company has connections with about 80 percent of the wells in the field. The other connections are held by Gulf Pipe Line Company.

Phillips reduces purchases in Kansas; upsets ratable takings

Ratable taking in Kansas was thrown into discord last week when Phillips Petroleum Company reduced its purchases by 15 percent. This concern had been taking around 13,500 barrels daily from 50 oil fields.

The Kansas Corporation Commission called other purchasers into a conference in an effort to reallocate output and restore ratable taking.

Crude Production

Decrease of 19,330 barrels daily brings U. S. total to 3,224,895 barrels; well under U. S. figure

UNITED STATES crude oil production showed a decline of 19,330 barrels daily in the week ended September 17, having averaged 3,224,895 barrels a day. That was 219,405 barrels less than the average daily output estimated by the Bureau of Mines as required for domestic consumption during September.

The decline during the past week was principally caused by the reduced output in Texas, Oklahoma and Louisiana, that more than offset increases in California and Kansas.

Texas last week averaged 1,215,300 barrels daily, which was 28,150 barrels less than in the previous week, 183,300 barrels less than the federal allocation and 17,948 less than the state allowable.

Oklahoma output was down 725 barrels at 446,775 barrels daily, having been 81,525 barrels below the Bureau of Mines recommendation, but 18,775 barrels a day above the state allowable.

Louisiana likewise showed a decrease of 2595 barrels, having averaged 265,030 barrels a day. That was 9730 barrels more than the estimated demand and 4770 barrels more than the allowable prescribed by the state.

California had a gain of 15,100 barrels, averaging 682,700 barrels daily, which was 44,400 barrels more than the federal allocation and 67,700 barrels a day more than the recommendation of the Central Committee of California Oil Producers.

Kansas averaged 167,100 barrels a day, or 12,800 barrels more than in the previous week. This is 900 barrels less than the Bureau of Mines estimate, but 1600 barrels a day more than the state allowable.

Would halt sale of oil confiscated in East Texas

Austin, Texas. — Attorney General William McCraw last Friday attempted to obtain from the courts orders preventing the sale of some 200,000 barrels of confiscated oil which sold for about 30 cents in the East Texas field. He pointed out that in one instance where the oil sold for this price, no major companies bid, although the oil was worth about 80 or 90 cents a barrel.

McCraw said that many prospective purchasers refused to bid on the oil because they believed titles were defective. He said that the sales would be contested in an effort to obtain a fair price.

Early this month Premier Refining Company attempted to intervene in a confiscation suit, announcing that it was a prospective purchaser and would attempt to perfect title. At that time the intervention was successfully opposed by Assistant Attorney General Dick Holt and attorneys for General American Oil Company, a defendant in the case.

Ontario may increase its gasoline tax

A proposal to increase the provincial gasoline tax from 6 to 7 cents a gallon is being considered by the Ontario government, it was learned in Toronto last week. The estimated $3,000,000 which would accrue from imposition of the additional cent of taxation would be passed back to the municipal treasuries. Legislation for the increase will be introduced at the 1939 legislature by the Hepburn government, which controls that body.

With the exception of Quebec, which also has a 6-cent tax, Ontario's provincial tax is lower than that of other Canadian provinces.

United States Crude Oil Production

Estimates Compiled by The OIL WEEKLY

DISTRICT OR STATE	Bureau of Mines Recommendation (Daily in Sept.)	State Allowable in Sept.	BARRELS DAILY FOR WEEK ENDED Sept. 17	Sept. 10
TEXAS—				
Texas Panhandle	.....	.....	63,400	73,900
North Texas	.....	.....	71,100	76,200
West Central Texas	.....	.....	28,100	29,150
West Texas	.....	.....	188,400	196,300
East Central Texas	.....	.....	91,300	90,100
East Texas Field	.....	.....	369,700	369,100
South Texas	.....	.....	208,900	215,300
Texas Gulf Coast	.....	.....	194,400	193,400
Total Texas	1,398,600	1,233,248†	1,215,300	1,243,450
CALIFORNIA—				
Long Beach	.....	.....	56,500	56,600
Santa Fe Springs	.....	.....	33,400	31,700
Huntington Beach	.....	.....	33,000	33,300
Dominguez	.....	.....	26,000	25,600
Ventura Avenue	.....	.....	34,500	34,900
Midway-Sunset	.....	.....	87,800	49,800
Kettleman Hills	.....	.....	63,900	64,800
Wilmington	.....	.....	92,800	93,000
Others	.....	.....	254,800	277,900
Total California	638,300	615,000*	682,700	667,600
OKLAHOMA—				
Oklahoma City	.....	.....	105,250	107,125
Seminole Area	.....	.....	90,275	90,450
Fitts	.....	.....	38,300	38,850
Others	.....	.....	212,950	211,075
Total Oklahoma	528,300	428,000	446,775	447,500
LOUISIANA—				
North Louisiana	.....	.....	75,630	80,325
South Louisiana	.....	.....	189,400	187,300
Total Louisiana	255,300	260,260	265,030	267,625

DISTRICT OR STATE	Bureau of Mines Recommendation (Daily in Sept.)	State Allowable in Sept.	BARRELS DAILY FOR WEEK ENDED Sept. 17	Sept. 10
KANSAS—				
Burrton-Haven	.....	.....	9,525	9,400
Russell County	.....	.....	25,925	24,050
Silica	.....	.....	11,350	6,950
Others	.....	.....	120,300	113,900
Total Kansas	168,000	165,500	167,100	154,300
NEW MEXICO	111,600	106,000	106,700	106,300
MICHIGAN	57,000	.....	51,900	51,700
ARKANSAS	53,700	.....	51,890	58,350
MOUNTAIN STATES—				
Wyoming	65,600	.....	53,900	54,600
Montana	14,000	.....	13,100	12,800
Colorado	4,600	.....	3,800	3,500
Total Mountain States	84,200	.....	70,800	70,900
EASTERN STATES—				
Pennsylvania Grade	.....	.....	77,100	76,700
Southern Illinois (New Pools)	.....	.....	50,300	49,250
Illinois-Indiana (Old Pools)	.....	.....	15,100	14,150
Others, Eastern	.....	.....	24,200	23,100
Total Eastern States	149,300	.....	166,700	163,200
Total United States	3,444,300	.....	3,224,895	3,244,225

† Daily average, considering Saturday and Sunday shut-downs.

* Recommendation of Central Committee of California Oil Producers.

Association Meetings

A. I. M. E. meets in San Antonio on October 5 and 7 . . . American Gas Association's annual convention at Atlantic City October 10 to 15

Add extra day to program of San Antonio A. I. M. E.

Benjamin C. Craft, professor of petroleum engineering at Louisiana State University, exceeded expectations when he was called on to chairman the program committee of the Petroleum Division of the American Institute of Mining and Metallurgical Engineers to the extent that an extra day had to be added to the schedule for technical sessions in San Antonio, making the date of the meeting October 5-7, instead of 6-7 as previously announced.

Preliminary Program

As planned, the program will consist of the following contributions:

Squeeze Cementing. By C. P. Parsons, Halliburton Oil Well Cementing Company.

Properties of Oil Well Cement. By Eugene L. Davis, The Texas Company.

A Method for Determining the Water Content of Sands. By H. G. Botset, Gulf Refining & Development Company.

Core Analysis and Interpretation. By Howard Pyle and John Sherborne, Union Oil Company of California.

Core Analysis. By James A. Lewis, Core Laboratories, Inc.

The Effect of Pressure Reduction on Core Saturation. By H. G. Botset and Morris Muskat, Gulf Research & Development Company.

Electric Logging. By R. Roubidoux, Halliburton Oil Well Cementing Company.

An Apparatus for the Determination of Porosity by the Gas Expansion Method. By Albert B. Stevens, A. & M. College of Texas.

New Developments in the Chemical Treatment of Wells. By P. E. Fitzgerald, Dowell, Inc.

Effect of Acid Treatment Upon Ultimate Recovery from Some Limestone Fields in Kansas. By R. E. Heithecker, U. S. Bureau of Mines.

The Surface Chemistry of Clays and Shales. By Allen D. Garrison, The Rice Institute.

The Viscosity Characteristics of Clays. By G. Broughton and R. S. Hand, Massachusetts Institute of Technology.

Surface and Interfacial Tensions of Oil-Water Systems in Texas Oil Sands. By H. K. Livingston, Shell Research Fellow, the University of Texas.

Flow of Oil-Water Mixtures Through Unconsolidated Sands. By M. C. Leverett, Massachusetts Institute of Technology.

The Interfacial Tension Between Reservoir Oil and Water. By Claude R. Hocott, Humble Oil & Refining Company.

A Visual Study of the Flow of Air-Water Mixtures in a Vertical Pipe. By R. L. Huntington and Sylvan Cromer, University of Oklahoma.

Significance of the Critical Phenomena in Oil and Gas Production. By D. L. Katz and C. C. Singleterry, University of Michigan.

Hydrocarbons. By W. K. Lewis, Massachusetts Institute of Technology.

Fluid Level Determination with the Echometer. By J. J. Jakosky, International Geophysics, Inc.

The Application of Gravel-Packing to Oil Wells in California. By E. L. Davis and W. A. Clark, The Texas Company.

Economics of Repressuring By R. J. Schilthuis, Humble Oil & Refining Company.

The Development of Decline Curve Analysis by Valuation Classes at the University of Oklahoma. By H. E. Gross, University of Oklahoma.

Geopyhsical Possibilities of Soil Analysis. By Mitchell Tucker, Geological Scientific Service Company.

"Gas Marches On" theme of annual convention

The twentieth annual convention of the American Gas Association, which takes place October 10-13 in Atlantic City, New Jersey, will offer gas men an opportunity to keep abreast of fast-changing conditions in the industry today. Since the Cleveland convention a year ago, many unprecedented changes have taken place which will be reflected in the program at Atlantic City. The entire program revolves around the theme "Gas Marches On."

Three general sessions will be held in the ballroom of the Atlantic City Auditorium. These sessions are customarily devoted to general subjects of national significance and this year is no exception to this rule. However, this year's speakers have been selected mostly from outside the gas industry. A well-balanced program of talented speakers is the result.

Sectional and departmental meetings will cover in detail specialized problems within the scope of their activities. Many valuable committee reports will supplement papers by individual experts who have been selected for their exceptional ability. Headquarters of these meetings will be as follows: Natural Gas Department and Technical Section at the Hotel Ambassador; Accounting Section at the Ritz-Carlton Hotel; Commercial and Industrial Gas Sections at the Hotel Traymore.

Natural Gas

The tentative program of the Natural Gas Department follows:

Monday Morning, October 10, 10:00 o'Clock

Main Technical and Research Committee

Presiding, Howell C. Cooper, Chairman.

Opening Remarks by Chairman.
Committee and Subcommittee Reports.

Geophysical Methods of Exploration, Dr. J. Brian Eby, Consulting Geophysicist, Houston, Texas.

Small Intermediate Compressor Stations as a Means to Increase Main Line Capacity, H. C. Wallace, Chief Engineer, Commonwealth Gas System, New York, N. Y.

Main Technical and Research Committee Roundtable Luncheon.

Monday Afternoon, 2:00 o'Clock

Opening Remarks by Chairman, Robert W. Hendee, General Manager, Colorado Interstate Gas Co., Colorado Springs, Colo.

Why Not Eliminate the Waste? Elmer F. Schmidt, vice president, Lone Star Gas Company, Dallas, Texas.

Regulation of Interstate Natural Gas Pipe Lines, Hon. Clyde H. Seavey, Acting Chairman, Federal Power Commission, Washington, D. C.

Address: (Subject To Be Selected), General Baird H. Markham, Director, American Petroleum Industries Committee, New York, N. Y.

Report of Nominating Committee.
Election of Officers.
Adjournment.

Technical Sessions

The tentative program for the technical sessions follows:

Tuesday, October 11, 2:00 o'Clock

Address of Chairman, J. V. Postles, Chairman, Technical Section, Philadelphia, Pa.

Report of Nominating Committee, M. I. Mix, Chairman, The Peoples Gas Light & Coke Co., Chicago, Ill.

Gas Conditioning Committee, O. S. Hagerman, Chairman, Atlantic Seaboard Corp., New York, N. Y.

(a) A Primer on Deposits in Gas Pipes and Appliances, Dr. A. R. Powell, Koppers Co., Pittsburgh, Pa.

(b) Control of Deposits in Manufactured Gas Distribution Systems, A. R. Belyea, Consolidated Edison Co. of New York, New York, N. Y.

(c) Sulphur Corrosion of Materials, H. D. Lehman, The Philadelphia Gas Works Co., Philadelphia, Pa.

Research and Recovery — Which Comes First? Prof. Erwin H. Schell, Massachusetts Institute of Technology, Cambridge, Mass.

The Importance of Cadet Engineering Training to the Gas Industry—(Speaker to be announced).

Sales and Service, B. T. Franck, Grand Rapids Gas Light Co., Grand Rapids, Mich.

Chemical Committee, Prof. J. J. Morgan, Chairman, Columbia University, New York, N. Y.

Wednesday, October 12, 2:00 o'Clock

Production Committee, C. R. Locke, Chairman, Chicago By-Product Coke Co., Chicago, Ill.

Colloidal Properties of Spent Oxides, Dr. W. J. Huff, University of Maryland, College Park, Md., and Dr. Frank H. Dotterweich, Texas College of Arts & Industries, Kingsville, Texas.

Extinction of Gas Flames by Steam, Data Underlying the Practice of Steam Purging, Louis Shnidman, Rochester Gas & Electric Corp., Rochester, N. Y.

Steam Purging, R. E. Kruger, Rochester Gas & Electric Corp., Rochester, N. Y.

Thursday, October 13, 2:00 o'Clock

Distribution Committee, H. L. Gaidry, Chairman, New Orleans Public Service, Inc., New Orleans, La.

Engineering Significance on the National Bureau of Standards Soil Corrosion Data, K. H. Logan, National Bureau of Standards, Washington, D.C.

High Pressure Welding, Dr. W. A. Pearl, Armour Institute of Technology, Chicago, Ill.

Variations in Mixing Formulae in Higher B.t.u. Gases, L. J. Willien, Public Utility Engineering & Service Corp., Chicago, Ill.

Permian Basin area to be featured at A.A.P.G. meeting

The mid-year meeting of American Association of Petroleum Geologists is being held at El Paso, Texas, September 27 to October 2, inclusive. The program and arrangements are under the sponsorship of West Texas Geological Society with the cooperation of South Texas Geological Society of Corpus Christi, and San Antonio, El Paso Chapter of American Institute of Mining and Metallurgical Engineers, New Mexico Geological Society, the Texas College of Mines and Metallurgical faculty and the New Mexico School of Mines faculty. Berte R. Haigh, Midland, is general chairman; Cary P. Butcher, Midland, is vice chairman in charge of the A.A.P.G. affairs, while H. A. Hemphill, Midland, is vice chairman in charge of West Texas Geological affairs.

Three trips are planned as part of the convention, two being pre-convention tours, one being a post-convention trip. Through inability to complete necessary arrangements, the proposed Chihuahua trip into Mexico has been definitely canceled. Two choices of the concurrent, pre-convention trips are available. Trip A, by bus, leaves El Paso for the Franklin and Jarilla sectors, returning through Tularosa Basin and Elephant Butte, arriving in El Paso through Rio Grande Valley. Trip B is by private car through the younger Paleozoic section between El Paso and Alpine, the night stop. The older Paleozoic section is to be studied on the return. Both trips leave El Paso on September 27, arriving back the following evening. The post-convention trip is a tour into the Silver City area of New Mexico, returning the second day via Deming, October 2, to El Paso in time to catch outgoing trains.

The program and arrangements are under the direct sponsorship of West Texas Geological Society, Midland, with James FitzGerald, Jr., chairman of publicity, and Georges Vorbe, chairman of the committee arranging geologically interesting side trips. The Midland office should be addressed for information regarding arrangements. Committees in charge anticipate an attendance exceeding one thousand.

Entertainment activities include a trip for visiting ladies, who will be greeted by wives of the faculty of the colleges, to the Mexican market at Juarez and a dinner dance in that town, a fashion show at El Paso with a supper at El Paso Country Club. For the men, entertainment includes the dinner dance, stag barbecue at McKelligan Canyon, and an 18-hole medal play over the El Paso Country Club golf course.

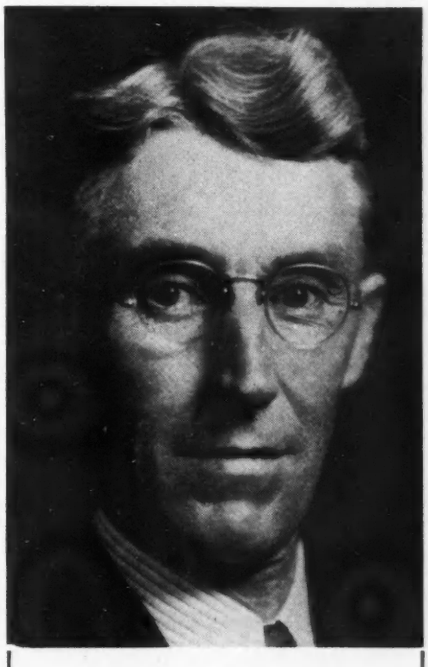
An interesting feature of the meeting is the printed program which will show correlation of geologic terms related to West Texas. Twenty-one papers are included in the Technical Program Committee's plans. Ample time for discussion is provided. The complete technical program follows in correct order of presentation, beginning Thursday, September 29.

Ed W. Owen, geologist, L. H. Wentz, Oil Division, San Antonio, Texas: Summary of Regional Geology and Oil Development of the West Texas Permian Basin.

James Fitz Gerald, Jr., division manager, Land and Leases, Skelly Oil Company, Midland, Texas, presenting the following two cross sections.

W. C. Fritz, geologist, Skelly Oil Company, Midland: South - North Cross Section from Pecos County, Texas, northward to Roosevelt County, New Mexico.

E. Hazen Woods, geologist, Sinclair Prairie Oil Company, Mid-



Berte R. Haigh, general chairman for the mid-year meeting of the American Association of Petroleum Geologists, slated to be held in El Paso September 27-October 2 under sponsorship of the West Texas Geological Society, is geologist in charge of the Midland district of University Lands.

A native of California, Haigh graduated from the College of Mines and Metallurgy of the University of Texas in June, 1925, taking a B.S. degree in mining engineering. From June to February, 1926, he was employed as a research metallurgist. The following month saw Haigh as field geologist of Dixie Oil & Gas Company, a position which he left in September, 1928, to become assistant professor of geology and engineering at his alma mater. After six years of teaching, Haigh was transferred to the University Lands division of the University of Texas.

M. M. Kinley to speak at Houston A.P.I. meeting

The regular monthly fall series of meetings of the Houston Chapter of the American Petroleum Institute's Division of Production will be renewed Monday, September 26, with a specially interesting program comprised of both entertainment and educational features. The meeting will be held at Brae-Burn Country Club and will consist of golf, dinner and moving pictures.

Principal speaker of the evening will be Myron M. Kinley, world famous oil well fire fighter, who will show some of his collection of moving pictures of oil well fires and lead a discussion on the subject. Kinley has extinguished more oil well fires than any other person. He has been called to such distant points as Roumania, South America, etc., to control some stubborn blaze.

The golf tournament will be a blind handicap affair and will get under way promptly at 1 p.m. Non-members to Brae-Burn Country Club will be charged the nominal green fee of $1.00.

Dinner will be served at 6:30. A charge of 75 cents has been fixed for this part of the program.

Immediately following dinner, Kinley will present his oil well fire pictures. after which Warren L. Baker, editor of THE OIL WEEKLY, will discuss "Current News and Economic Situation of the Oil Industry."

"We cordially invite all oil men to join us," states E. P. Hayes of The Texas Company, who is vice chairman of the Houston Chapter, "but due to the exceptionally large attendance anticipated, it is necessary that we know in advance how many are going to take part in the different events. Consequently, we will appreciate notification at once." Those wishing to play golf or to be present for dinner should notify Hayes, whose telephone number is F-2141.

Preliminary plans made for Mid-Continent Association

San Antonio.—Eight hundred or more oil operators from various portions of Texas are expected to attend the annual meeting of the Mid-Continent Oil & Gas Association to be held in San Antonio October 27 to 30, inclusive. Preliminary plans for this meeting were outlined at a meeting at the Plaza Hotel in San Antonio September 15. The meeting was held under the sponsorship of Al A. Buchanan, local drilling contractor.

At the meeting, a series of committee chairman were appointed, including: L. D. Ormsby, golf; Mrs. Norma Hancock, women's entertainment; Frank B. Lefevre, entertainment; Pat Swearingen, entertainment of distinguished guests; F. M. Frasher, finance.

Plans for this convention brought about the creation of a "Wildcat Committee," which will operate in connection with arrangements for this convention. It then will become a permanent organization. Initial members of the committee include F. M. Frasher, Duval Oil Corporation; J. W. Kaye, Frick-Reid Supply Corporation; E. J. Miller, president of the South Texas National Bank; Arthur Pfiel, convention department for the San Antonio Chamber of Commerce; Artie Compton, manager the Gunter Hotel; Jack White, manager the Plaza Hotel; Arthur M. Eldridge, Longhorn Portland Cement Company; Walter C. Sparks, president the Bexar County National Bank; R. H. Abrams, Phillips Drilling Company; F. B. Lefevre, Adams & Lefevre; H. E. Smyres, Blackstock Oil Company; R. J. Price, Transwestern Oil Company; Hugh Bergen, Bridgeport Machine Company; Earl S. Post, The Oil Weekly; Jack Cowan, Alamo Iron Works; Al Buchanan, Al Buchanan Drilling Company; H. D. Ormsby, Chevrolet dealer; and Pat Swearingen, attorney.

land: South-North Cross Section from Central Pecos County, Texas, through Winkler County, Texas, to Roosevelt County, New Mexico.

Robert I. Dickey, geologist, Stanolind Oil & Gas Company, Midland: East-West Cross Section from Fisher County, Texas, through Andrews County, Texas, to Eddy County, New Mexico.

E. H. Sellards, geologist, Bureau of Economic Geology, Austin, Texas: Early Paleozoic Formations in Texas.

M. G. Cheney, consulting geologist, Coleman, Texas: Geology of North Central and Central Texas.

Elliot H. Powers, geologist, Gulf Oil Corporation, Midland: Sand Hills Area, Western Crane County, Texas.

L. A. Nelson, associate professor of geology, College of Mines and Metallurgy, El Paso, Texas: Paleozoic Stratigraphy of the Franklin Mountains of West Texas.

Claude E. Needham, associate professor of geology, School of Mines, Socorro, New Mexico: Correlation of the Pennsylvanian Rocks of New Mexico.

John W. Skinner, geologist, Humble Oil & Refining Company, Midland: Upper Paleozoic Section of the Chinati Mountains, Presidio County, Texas.

Louis V. Olson, geologist, American Smelting & Refining Company, El Paso: Aerial Photography for Geological Exploration.

Cary P. Butcher, geologist, Tide Water Associated Oil Company, Midland: The Guadalupe Mountains as They Look to the Aerial Geologist.

Ronald K. De Ford, geologist, Argo Oil Corporation, Midland, Geo. D. Riggs and Neil H. Wills, consulting geologists, Carlsbad, New Mexico: Surface and Subsurface Formations, Eddy County, New Mexico.

George A. Kroenlein, geologist, Lovington, New Mexico: Salt, Potash, and Anhydrite in the Castile Formation of Southeast New Mexico.

Phillip B. King, associate geologist, U. S. Geological Survey, Washington, D. C.: Relation of Permian Sedimentation to Tectonics in Guadalupe Mountain Region.

E. Russell Lloyd, consulting geologist, Midland: Theory of Reef Barriers.

John Emery Adams, geologist, Standard Oil Company of Texas, Midland, and Lincoln R. Page, associate professor of geology, University of Colorado, Boulder, Colorado: Stratigraphy, Eastern Midland Basin, Texas.

Taylor Cole, geologist, University Lands, Midland: The Black Shale Basin of West Texas, a Preliminary Report.

Frank E. Lewis, consulting geologist, Midland: Stratigraphy of the Upper and Middle Permian of West Texas and Southeast New Mexico.

W. D. Anderson and James R. Day, geologists, Amerada Petroleum Corporation, Midland: Monument Field, Lea County, New Mexico.

Sam C. Giesey and Frank F. Fulk, geologists, Stanolind Oil & Gas Company, Midland: North Cowden Field, Ector County, Texas.

Morris A. Elms, geologist, Phillips Drilling Company, San Antonio, Texas: Volcanics of the Buck Hill Quadrangle, Brewster County, Texas.

These papers will cover most of the recent geological development, so that anyone interested may readily acquire a comprehensive picture of the large potential reserve of the area.

Commission reports growth in Texas July output and wells

A report issued by the Texas Railroad Commission last week indicates that production for Texas during the month of July totaled 41,902,226 barrels. This was a daily average of 1,351,685 barrels, about 150,000 barrels daily higher than the average for the month of June.

The increase resulted from allowables produced by new wells, and because wells throughout the state were closed in for fewer days during the month.

The commission reported 82,328 producing wells, which included 33,151 flowing wells and 49,177 pumping wells. This was an increase of 545 wells over the number reported producing during the month of June.

The total allowable for the month averaged 1,386,088 barrels daily. Producers reported deliveries of 41,397,123 barrels to pipe lines, 83,837 barrels to railroads, truck movements of 199,625 barrels, 27,970 barrels for miscellaneous purposes, and 15,669 barrels were used for fuel. Lease storage rose to 4,885,469 barrels, a gain of 73,582 barrels during the month of July.

Comparative figures for July, 1937, and July, 1938, show that the average indicated production per well was 2.7 barrels lower this year and averaged 16.4 barrels per day.

The comparative figures for the current year and 1937 are shown in the table below:

	July, 1937	July, 1938	Increase	Decrease
Number of Operators	4,951	5,522	571	.....
Number of Leases	14,515	16,018	1,503	.....
Number of Flowing Wells	29,762	33,151	3,389	.....
Number of Pumping Wells	43,740	49,177	5,437	.....
Total Producing Wells	73,502	82,328	8,826	.....
Lease Storage (Beginning)	4,391,114	4,811,887	420,773	.....
Total Allowable	44,762,836	42,968,725	.....	1,794,111
Daily Average Allowable (31 Days)	1,443,962	1,386,088	.....	57,874
Daily Average Allowable per Well	19.8	16.8	.....	3.0
Indicated Production	43,584,364	41,902,226	.....	1,682,138
Daily Average	1,405,947	1,351,685	.....	54,262
Daily Average per Well	19.1	16.4	.....	2.7
Runs to Pipe Lines	43,172,036	41,397,123	.....	1,774,913
Tank Car Movements	52,578	83,837	31,259	.....
Truck Movements	137,322	199,625	62,303	.....
Fuel	37,053	15,669	.....	21,384
Miscellaneous	28,860	27,970	.....	890

Petroleum Institute names public relations committee

Appointment of W. S. S. Rodgers, of The Texas Company, New York, as chairman of the American Petroleum Institute's newly-organized Committee on Public Relations has been announced by Institute President Axtell J. Byles. Rodgers, who is president of The Texas Company, will serve also as chairman of the Public Relations Steering Committee, the first of a number of sub-committees to be appointed from membership in the general committee and from various branches of the industry.

The new committee, which already comprises 27 members and is to be enlarged, replaces the Public Relations Advisory Committee, which has functioned with limited membership and scope of activities for a number of years. Plans contemplate the appointment of sub-committees representative of every active branch of the industry.

The first meeting of the Committee on Public Relations has been scheduled for Monday, September 26, in the Stevens Hotel at Chicago, Ill. The meeting will be largely discussional in nature. Members of the committee so far appointed are:

Paul V. Barrett, The Ohio Oil Company, Findlay, O.; Paul G. Blazer, Ashland Refining Company, Ashland, Ky.; Ralph C. Champlin, Ethyl Gasoline Corporation, New York; James A. Dunn, Barnsdall Oil Company, New York; W. R. Francisco, Deep Rock Oil Corporation, Tulsa, Okla.; A. C. Galbraith, Union Oil Company of California, Los Angeles, Calif.; and D. W. Grant, Pennzoil Company, Oil City, Pa.

Also Eben Griffiths, Socony-Vacuum Oil Company, Inc., New York; Walter R. Haun, Lion Oil Refining Company, Eldorado, Ark.; C. L. Henderson, Vickers, Petroleum Company, Wichita, Kans.; C. C. Herndon, Skelly Oil Company, Tulsa; Allan Jackson, Standard Oil Company, (Indiana), Chicago; Francis L. Jehle, Globe Oil & Refining Company, Wichita; Roy B. Jones, Panhandle Producing & Refining Company, Wichita Falls, Texas; R. C. Jopling, Phillips Petroleum Company, Bartlesville, Okla.; and E. B. Lyman, Standard Oil Company (New Jersey), New York.

Also Ray E. Miller, Hanlon-Buchanan, Inc., Tulsa; George D. Olds, Continental Oil Company, New York; H. F. Parsons Tide Water Associated Oil Company, New York; Philip Patchin, Standard Oil Company of California, San Francisco, Calif.; T. D. Peace, Shell Union Oil Corporation, New York; D. T. Pierce, Consolidated Oil Corporation, New York; and Richard Rollins, The Atlantic Refining Company, Philadelphia.

Also Paul Ryan, The Pure Oil Company, Chicago; H. A. Schramm, Kanotex Refining Company, Arkansas City, Kas.; George H. Shaw, Cities Service Company, New York; James A. Tanham, The Texas Company, New York; and W. K. Warren, Warren Petroleum Company, Tulsa.

The present membership of the Public Relations Steering Committee follows:

Northrop Clarey, Standard Oil Company (New Jersey); E. W. Hodges, Cities Service Oil Company, New York; T. D. Peace, Shell Union Oil Corporation, New York; D. T. Pierce, Consolidated Oil Company New York; Conger Reynolds, Standard Oil Company (Indiana), Chicago; and J. C. Welliver, Sun Oil Company, Philadelphia.

Victor H. Scales, of the Institute staff, has been appointed secretary of the committees.

Less than 80 years ago petroleum first lubricated a circular saw at a mill near Oil Creek, Pa. Today it lubricates the wheels of civilization.

WEEK'S DRILLING HIGHLIGHTS

Wyoming

About 600 acres were opened for exploration by a north extension to Frannie field in Park County. A gas well in Mahoney Dome, Carbon County, deepened and got oil shows in Tensleep. Osage field, Weston County, has an extension swabbing 4 barrels hourly pending a pumping test.

North Dakota

Although abandoned at 10,281 feet because of mechanical difficulties, the wildcat on Nesson structure, Williams County, broke the old Rocky Mountain depth record of 9381 feet.

California

The record for the world's deepest producing well may pass into new hands; a well in Rio Bravo field is swabbing for production at 14,018 feet. Coalinga Nose in Fresno County got back into the spotlight with two exceptional wildcat producers, one for 2500 barrels and one for 3000 barrels.

North Louisiana

Lisbon field was defined on the west by a dry hole. A wildcat 2 miles east of Bisteneau gas-distillate field is testing Pettit lime showings. Cotton Valley's deepest well is preparing to test three sands; the "D" sand of the field was extended a mile southwest.

South Texas

Two Vicksburg trend wildcats 12 miles apart, one in Jim Hogg County, the other in Starr County, both possibly on the same structure, were converted into flowing producers. Alice field has an outpost testing Vicksburg sand 8500 feet northeast of the field. La Reforma pool in Starr County is being extended 1800 feet southwest. La Rosa, Refugio County, got a new pay at 5900 feet. A 7000-foot sand was opened in Keeran field, Victoria County. Southeastern McMullen County recorded a new Government Wells sand field.

Comparison of Permits Granted for New Wells

STATE	Week Ending Sept. 17	Total this Mo.	Total this Year	Total this Date Last Year	1937 Year Total
Arkansas	7	17	182	182	240
California	30	90	898	1,144	1,584
Louisiana	17	51	935	918	1,227
Kansas	29	96	1,138	2,008	2,663
Michigan	21	81	617	715	958
Oklahoma	55	129	1,480	2,089	2,711
Texas	367	664	9,497	12,985	17,238
Total	526	1,128	14,747	20,041	26,621

New Mexico

Hopes of a new high gravity pool 2 miles southeast of Vacuum field were realized. Four miles northwest of the field, a test showed a little free oil between 4649 and 4651 feet.

Michigan

Heavy drilling campaigns were assured for the next 30 to 90 days in two widely separated areas because of unusual completions: a 1500-barrel well in Freeman-Redding district of Clare County, and two completions, one for 2450 barrels and the other for 2900 barrels, from shallow pay in Van Buren County.

Arkansas

Magnolia field, a Permian lime proposition in Columbia County, recorded its second producer and a ½-mile extension, the well doing better than 450 barrels.

South Louisiana

New sands are being tested at Bayou Des Allemands, Gibson, Jeanerette, East Hackberry and Four Island fields. South Baton Rouge was promised an 1800-foot extension. A sand at 12,049-12,120 feet at Raceland, Lafourche Parish, is giving some indication of commercial production. Houma field's south outpost was disappointing at 10,166 feet, but drilling continues.

Oklahoma

A mile northeast of Beebee field, Pontotoc County, a wildcat pumping 240 barrels from Viola lime at 2491 feet indicates a new field or an extension. Creek County recorded a Wilcox sand wildcat failure at 4244 feet.

Kansas

Hafferman field, Rice County, got a ½-mile north extension when a well filled 700 feet with oil from Arbuckle lime at 3741 feet. Zenith pool, Stafford County, got a minor extension to the north, a Misener sand well doing 100 barrels an hour.

Texas Gulf Coast

Lower Frio sand at 7730 feet yielded a new field north of Markham in Matagorda County. A new sand was found at 5569 feet on the northwest side of Orange field. The second completion in the deep sand at Segno, Polk County, did 653 barrels. Eureka field, Harris County, apparently will get a ¾-mile extension and a new sand.

Summary of Wells Completed in the United States
Week Ending September 17, 1938

	Completions	Oil Wells	Gas Wells	Failures	Initial Production	Total, 1938	Total this Date, 1937
Alabama	.....	.....	.....	.....	.....	2	1
Arkansas	5	4	.....	1	4,463	164	83
California	16	15	.....	1	5,517	916	1,080
Colorado	.....	.....	.....	.....	.....	5	10
Florida	.....	.....	.....	.....	.....	.....	1
Georgia	.....	.....	.....	.....	.....	1	.....
Illinois	18	12	.....	6	3,546	973	146
Indiana	1	1	.....	.....	264	96	90
Kansas	33	25	1	7	30,399	1,224	1,901
Kentucky	15	9	.....	6	767	550	274
Louisiana	11	4	1	6	3,629	785	693
Michigan	25	17	.....	8	12,972	643	685
Mississippi	.....	.....	.....	.....	.....	11	10
Montana	3	2	1	.....	89	50	140
Nebraska	.....	.....	.....	.....	.....	1	.....
New Mexico	9	8	.....	1	2,936	383	505
New York	*10	9	.....	1	34	*493	*918
Ohio	16	4	10	2	81	685	1,071
Oklahoma	69	50	3	16	31,226	1,572	2,232
Pennsylvania	*37	30	5	2	51	*1,553	*2,176
Tennessee	.....	.....	.....	.....	.....	2	.....
Texas	207	165	3	39	162,031	9,291	10,936
Utah	1	.....	.....	1	.....	3	.....
West Virginia	15	3	9	3	206	499	660
Wyoming	.....	.....	.....	.....	.....	74	76
Total this week	491	358	33	100	258,211	19,976	23,688
Total last week	568	399	31	138	274,388	.....	.....
Total this year	19,976	13,869	1,414	4,693	13,257,852	.....	.....

*Includes water-intake and pressure wells.

Oklahoma Fields

Beebee extension well may be important development. Good wells in Ramsey pool swell completion average.

Tulsa—What may prove to be an important extension to the old Beebee field, Pontotoc County, came with completion of a pumping well from the Viola lime by Senora Oil & Gas Company, Cox 1, NWc 17-5n-5e, Pontotoc County. It was completed for 240 barrels from Viola lime, total depth 2491 feet.

This well is a mile northeast of Beebee production. A dry hole to the north indicates little extension in that direction. Between the well and the field, another well produced for a time from the Viola lime and was plugged upon exhaustion. This, however, was before adoption of acid as a stimulant for lime production and this situation gives encouragement that either a small field will be developed around the well or that it will be connected with the Beebee pool.

Extent of the new Southeast Braman pool, Kay County, will be tested by Atlantic Refining Company, whose Watson 1, SE NW 28-28n-1w, is being started. It is a mile south of the two wells now producing from second Wilcox sand in the new pool. Three other wells are drilling near the producers. Previous drilling in the area gave indications of only a small field upon completion of the first well. Owners of leases surrounding it have asked for 20-acre spacing on 1320 acres but the Oklahoma Corporation Commission has not yet given its ruling following the hearing last week. The test by Atlantic Refining Company is the first move to give the area a substantial extension.

In general field work in Oklahoma was at a low ebb last week, despite the fact that 73 wells were completed with 50 of them producers. Two of the recent completions in the Ramsey field, Payne County, were included in the list and their combined initial output of 22,000 barrels helped to swell total initial for the state to 31,226 barrels.

Most of the completions for the week were in the older area, where initial output is low. The week also brought 55 locations and these also reflected the tendency to keep within older areas in the hope of gaining minor extensions to old fields.

The Pottawatomie County wildcat of A. D. Spears, Vinson 1, SW NW SW 24-8n-5e, cored a section of the second Wilcox sand without favorable result. This well in the Maud section of Greater Seminole, had top of the first Wilcox at 4480 feet and top of the second member at 4490 feet. A core between 4500 and 4506 feet was dry. An electrical log will be taken of the hole as the next step in testing.

Creek County Wilcox Failure

In Creek County a Wilcox sand failure was marked up by Burke-Greis Oil Company, Goodman 1, NE NE SW 20-14n-7e. It had top of the Wilcox sand at 4238 feet and drilled to 4244 feet, where a test showed water.

The deep Coal County wildcat in the Centrahoma area, Carter Oil Company's Mote 1, C Ep SW NW, 19-2n-9e, is now in Bromide and drilling below 6850 feet. This test has cored in both the Viola and Bromide and has had small shows of both oil and gas but these have not been sufficient to justify testing.

In the Oklahoma City area the successful wildcat of Olson Oil Company and associates, Vanek 1, SE SW NE 4-12n-3w, has been put on production at 250 barrels daily to take its 15,000 barrels of discovery rights. It is flowing from the Second Wilcox sand, top 6721 feet, plugged back total depth 6768 feet. So far this well has drawn no further drilling. Evidence from previously drilled dry holes as well as the picture from shooting indicates a small structure.

The two wildcat tests in Garfield County were shut down part of last week after setting casing. Indian Territory Illuminating Oil Company had reached 6638 feet in Kichin 1, C SE SE 17-22n-5w, before shutting down to make repairs. Champlin Refining Company was held up a few days while cement was setting and more drilling pipe provided for drilling below the 9-inch casing which was set 6638 feet in Boehm 1, SW SW NE 4-24n-8w. Both tests are scheduled to reach the Wilcox sands.

A second test for the Noble area, Cleveland County, has been started by Gulf Oil Corporation, Taylor 1, C SE SE SW 1-7n-2e, where surface pipe is being set at 830 feet. This well is north of the wildcat producer completed in May by W. A. Delaney, Burgher 1, SEc SW 12-7n-2e. This well has never been a satisfactory producer as it has made water from the second Wilcox sand since completion. This formation was topped at 7670 feet and drilled to 7682 feet. It is now producing by submersible pump and making as much as 1500 barrels of fluid daily, with the oil output around 275 barrels daily.

Two miles further north Big Chief Drilling Company and Guy Hannun are ready to spud Strataeger 1, SW SW NW 25-9n-2e, a test scheduled to go to the Wilcox sands. It is on a trend south of the Moore pool.

Surface casing has been set at 980 feet in the 10,000-foot deep test in the old Chickasha gas field, Smith 1, C SE SW 25-2n-8w, where Carter Oil Company and a score of other concerns and individuals have a block of 2200 acres with rights below 3500 feet.

A Washita County wildcat was abandoned by Anderson-Pritchard Oil Corporation, School Land 1, SEc 14-6n-17w, in Wilcox sand at 2196 feet. Farther west Continental Oil Company is below 5500 feet in Proctor 1, C NW 28-10n-20w, a Washita County wildcat drilling on a block of 31,000 acres.

Development in the deep Fox-Milroy area of Carter and Stephens counties was at a standstill. Due to dropping four joints of tubing in the bottom of Lester 1, NWc NW 35-2s-3w, of Gulf Oil Corporation and Carter Oil Company, the hole could not be carried deeper as anticipated. Crew is now drilling on iron at 8134 feet. Total depth of the hole is 8147 feet. At this level it failed to produce from Oolitic lime after acid treatment. It was while pulling tubing to deepen that the accident occurred.

Carter Oil Company has plugged back to perforate and test Hunton lime in Feagin 1, C NW SW 36-2s-3w, which failed to produce in the Oolitic lime. This hole is now plugged back to 5828 feet and showing a slight amount of oil with some gas.

Tulsa.—Oklahoma field work last week resulted in 73 completions with 55 locations staked. Completions consisted of 50 producing wells with total initial output of 31,226 barrels, three gas wells! 16 dry holes and 4 abandoned locations.

Locations staked last week were in the following counties: Caddo, 1; Car-

OKLAHOMA Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Caddo—		
Darby Pet. Corp., Loose 2, nw se se 27-6n-10w	¶30	4850
Comanche—		
Wichita Oils, Inc., Palmer 8, nw sec nw 28-2n-10w	5	478
Truitt, Fee 10, sw se se 26-2n-11w	5	358
Fee 11, nw sw se se 26-2n-11w	*	370
Creek—		
Strozier, McDougal 1, sw se se nw 12-16n-11e	50	1738
Abe Pepis, Hughes 1, swc 15-18n-10e	*	2727
Grady—		
T. H. McCasland, Finch 1, se nw ne 21-3n-5w	12	1790
Hughes—		
Rodgers & Rodgers, Judy 1, se sw sw 5-6n-8e (pb 2927 ft)	14	2932
Davon Oil Co., Browning 1, cnl se ne 5-8n-10e	*	3171
Kay—		
Tide Water, School Land 1, se sw sw 16-28s-1w	1000	3632
Lincoln—		
Indian States, Bailey 1, nwc ne 2-12n-5e	139	4239
Wilcox O&G, DeLozier 10, ne sw sw 10-14n-6e	75	3056
DeLozier 7, se ne nw 15-14n-6e	60	3039
Muskogee—		
Robinson, Brown 6, ne sw se 18-13n-16e	70	2124
Parks, McDaniels 3, sec se 17-14n-19e	*	879
Okfuskee—		
Titus, Lehmer 1, c ne ne 26-11n-8e	132	3485
Commercial Drlg. Co., Smith 1, nw ne se 19-11n-10e	*	1605
Okmulgee—		
Shamblin et al, Musgrove 1, nw sw sw 19-13n-11e	*	3404
Wise, Webster 1, sw sw se ne 3-12n-12e	*	1491
Price, Grayson 4A, c e½ w½ ne 21-14n-14e	4	1132
Craig, Lewis 2A, sw ne se nw 25-14n-14e	10	1093
Bryan, Thompson Bros. 3, ne nec 8-15n-11e	20	1980
Devonian Oil Co., Thompson 1, nec se ne 8-15n-11e	*	2125
Beal et al, Marshall 2, se ne nw 28-15n-12e	*	2711
Young 1, ne ne ne nw 8-15n-14e	¶1	1706
Osage—		
Tide Water 9, ne ne se se 20-24n-9e	104	2233
I. T. I. O., 456, nec se 9-26n-11e	¶2	1839
Pawnee—		
Shelts, Dunn 7, sw ne se 10-20n-8e	228,000 ft gas	1764
Payne—		
Mid-Continent Pet. Corp., Ramsey 5, sw nw nw 18-18n-2e	8148	4789
Ramsey 6, ne sw nw 18-18n-2e	14,892	4763
Denver P. & R., Ollie Horton 1, ne nw ne 22-19n-1e	*	5028

ter, 1; Cleveland, 2; Coal, 1; Comanche, 2; Creek, 3; Garvin, 1; Lincoln, 1; Marshall, 1; Murray, 1; Muskogee, 2; Noble, 1; Okfuskee, 5; Okmulgee, 9; Osage, 2; Pawnee, 2; Payne, 3; Pontotoc, 2; Pottawatomie, 7; Seminole, 4; Sequoyah, 1; Stephens, 1; Tulsa, 2.

Atlantic offers bonds

Atlantic Refining Company stockholders have authorized an increase of the indebtedness of the company by not more than $50,000,000, and also voted to increase the authorized common stock from 4,000,000 to 5,000,000 shares. However, the entire $50,000,000 debt authorization will not be taken advantage of now, present plans calling only for an offering of $25,000,000 of 15-year debentures. Net proceeds of the issue will first be used to pay off bank loans totalling approximately $16,000,000, and the balance will be added to working capital. The directors have no present plans with respect to the additional common stock which has been authorized.

Company, Well and Location	Init. Prod. Bbls.	Depth
Pontotoc—		
Sinclair Prairie, Thompson 1, c e½ sw nw 1-1n-7e	20	4283
Patsy, Meharg & West 4, nw sw se 21-2n-6e	*	4479
Stanolind, Norris 6, nec se 26-2n-6e	91	4368
Simpson Roodhouse, Ill. Life 3, ne nw nw 28-2n-6e	90	3119
Blackstock, Kerby 2B, nw ne se 22-2n-7e	*	1317
Lake, Summers 2, sw se sw 25-5n-4e	70	2564
Clark & Cowden, Starrett 2, nw ne ne 21-5n-5e	196	2532
Ace Oil Co., Patterson 1, sw se ne 27-5n-8e	*	2729
Delaney, Butler 1, nwc ne 30-5n-8e	*	2849
Pottawatomie—		
Atlantic, Bass 1, swc se 9-7n-4e	5	3726
Elbar, Hathcock 2, sec sw 11-7n-4e	56	3145
Conley, Vinson 4, nw ne ne 13-7n-4e	50	4062
Indian States, Brandenberg 1, ne sw nw 21-7n-4e	*	3050
Smith, Hines 4, swc nw 22-7n-4e	251	3229
Blackwell, Cherry 4, nec 25-7n-4e	20	4130
Oklahoma Oil Corp., Smith 7, se sw se 25-7n-4e	240	4267
Magnolia, Magnolia-Billington 4, nw ne nw sw 36-7n-4e	300	4210
Hall, Lawrence 1, ne sw ne 29-7n-5e	*	50
Robertson et al, Johnson 1, nw ne sw 29-7n-5e	300	4116
Magnolia, Tull Fyke 2A, sec ne 29-7n-5e	40	2851
Deep Rock Oil Co., Tolon 3, swc 30-7n-5e (pb 4328 ft)	5	4310
Tolon 5, se sw sw 30-7n-5e	175	4210
Burkey, Billington 1, sec 31-7n-5e	225	4183
Hall, Smith 1, se ne ne 32-7n-5e	448	4069
Trigg, Vanselous 2, nw ne se 32-7n-5e	400	4046
Seminole—		
Pine, Cheparney 13, nw se sw 12-5n-7e	25	4335
Vierson, Factor 5, sec nw 25-5n-7e	55	2407
Magnolia, Fleet-Osborn 4, ne se ne 26-5n-7e (pb 2360 ft)	324	3180
Bryan Pet. Co., Ward 1, sw nw nw 3-6n-6e (pb 2422 ft)	8	2893
Atlantic, Bowles 2, sw nw nw 22-6n-6e (pb 3584 ft)	95	3617
Smith, Fleet Bros. 1, se nw nw 26-7n-5e	16	3502
Rogers & Rogers, Winton 1, nw ne nw 36-7n-5e (pb 2968 ft)	315	2973
Commercial et al, Edgman 1, sec 17-7n-6e	720	4380
Smith, Huddleston 1, nec sw 32-7n-6e	72	2946
Evans, Swan 2, nw nw se 33-7n-6e	105	2923
Smith, Harriman "A" 4, swc 33-7n-6e (pb 2883 ft)	432	2893
Carter Oil Co., Keokuk 3, cwl ne sw ne 2-10n-6e	214	4210
Tillman—		
I. T. I. O., Goodwin 1, nwc se 1-3s-19w	252	3137
Tulsa—		
Hardesty & Suppes, Davis 2A, ne ne ne nw 26-19n-12e (pb 455 ft)	5	1200

*Failures; †Junked; ¶Million cu. ft. gas.

Kansas Field Developments

Initial oil flow of completions continues high average. Market situation having adverse effect on new drilling.

Wichita. — Other than consistently large wells within proven fields, Kansas fields were without color last week. An extension of a half mile to the north was indicated for the Hafferman pool, Rice County, when oil rose 700 feet in the hole from 3741 feet in the Arbuckle lime. In the north end of the Zenith pool, Stafford County, production continues to move into the townsite.

Although the completion list for the week had four wells whose initial output was lower than 100 barrels each the state continued to hold above its recent average of 1000 barrels initial output for each completion. It had 25 producing wells in the list of 34 completions and their combined initial output was 30,399 barrels. The older fields of Barton, Barber, Rice and Russell counties contributed the larger wells.

This trend of drilling, however, is contributing to a market situation that threatens to grow more serious with seasonal decline in consumption. Last week Phillips Petroleum Company reduced its Kansas purchases by 15 percent, equal to 3500 barrels daily. Since then the corporation commission has held conferences with other crude oil buyers in an effort to restore ratable taking in fields where Phillips Petroleum Company has pipe line facilities.

The number of rigs running in Kansas is dropping but slowly each month but it is noticeable that the number of wildcat ventures is dropping more abruptly than inside locations and locations calculated to gain extensions of fields. The reason for this is that Kansas producers have little hope of gaining pipe line outlets for outpost wells. Several of its remote fields are now without pipe line outlet.

The extension promised for the Hafferman pool, Rice County, was drilled by E. V. Holland and associates, Reece 1, NWc 5-19-9w. At 3741 feet it had 700 feet of oil in the hole. The test may be treated with acid before making an effort to get production.

Latest producing well in the Zenith Townsite, north edge of the Zenith pool, Stafford County, is the second well drilled by J. R. Robertson of Wichita, who has induced owners of town lots to permit community drilling on 10-acre units. No. 2 is in SE SW SE SE 14-24-11w. It began flowing 100 barrels an hour from 3783 feet in the Misener sand, source of oil in the Zenith pool, total depth, 3783 feet. Another well is drilling in the townsite.

A wildcat for Sumner County was announced last week by Vickers Petroleum Company, which will drill Blue 1, NWc 1-33-2w, 7 miles southwest of the Wellington pool in the same county.

Wichita.—Kansas drilling activity for the week resulted in 33 completions while 29 locations were being staked. The completion list carried 25 oil wells, whose total initial production was 30,399 barrels, 1 gas well and 7 dry holes. By counties the locations were staked in: Barton, 8; Butler, 3; Cowley, 1; Ellis, 3; Ellsworth, 4; Harvey, 1; McPherson, 3; Rice, 2; Russell, 1; Stafford, 1; Sumner, 1; Woodson, 1.

KANSAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Barber—		
Pryor, Lockhart et al, Grant "C" 1, sw ne ne ne 18-31s-13w	1211	4611
Barbara O&G., Angle 3, c n½ n½ sw sw 14-33s-13w	¶14	4980
Barton—		
Shell, Hoffman "A" 6, se nw se sw 7-16s-13w	1933	3363
Hoffman "A" 7, ne sw ne sw 7-16s-13w	2231	3354
Hoffman "C" 3, csl se ne se 1-16s-14w	1839	3359
Bruce Oil Inc., Linsher 2, csl sw nw se 3-17s-13w	2734	3404
Crown Pet. Co., Wolf 1, se sw se 36-19s-12w	502	3374
Gulf, Spanier "B" 1, nw sw sw 12-20s-11w	2534	3273
I. T. I. O., Bryant "A" 10, cwl sw ne nw 25-20s-11w	2514	3266
Stanolind, Musenberg 1, nec 27-20s-11w	*	3326
Ellis—		
Shell, Rumsey 9, nw ne nw 23-11s-17w	2729	3368
Atlantic O. & Ref., Ubert 1, nwc ne 12-13s-18w	399	3626
Ellsworth—		
Continental et al, Rosa Janzen 1, ne sw sw sw 22-17s-8w	1833	3250
Atlantic O. & Ref., Daugherty 1, swc nw 33-17s-10w	678	3270
Greenwood—		
J. Enright, Swanson 1, nw ne se se 20-23s-13e	*	1677
Harvey—		
Ohio Oil Co., Hege 2, swc 13-22s-2w	164	3275
Sunray Oil Co., Hege 1, sw nw sw 13-22s-2w (pb 3280 ft)	542	3283
Marion—		
Progressive Oil Co., Evans 1, se sw se 33-22s-4e	5	2125
McPherson—		
Hutchinson O&G., Unruh 2, c ne sw 25-19s-2w (pb 2969 ft)	73	2977
Ness—		
Sinclair, McKinley "A" 1, nec nw sw 26-18s-26w	*	4709
Rice—		
Continental et al, Johnson 3, sec 12-18s-8w (pb 3226 ft)	1033	3240
Shell, Zajic 6, nw ne ne 13-18s-8w	2544	3216
Skelly Oil Co., Sledd 1, nwc sw 27-19s-9w	1043	3217
Saco Oil Co., Foote "B" 1, c e½ w½ nec se 7-20s-9w	64	3308
Russell—		
Stearns & Streeter, Stielow 1, nwc 32-11s-14w	*	3552
Phillips Pet. Co., Micheal 2, se sw nw 36-14s-14w (pb 2877 ft)	72	2952
Philhan et al, Kaufman 1, sec nw 10-15s-12w	*	3201
Skelly Oil Co., Neidens 9, nw se ne 32-15s-13w	2445	3342
Sedgwick—		
Prunty Prod. Co., Rausch "A" 2, swc se 16-25s-1e	1223	*
Stafford—		
Magnolia, Mattie Gates 2, se ne ne 34-21s-13w	1480	3360
Chas. Newbold, Walker 1, nec sw 24-24s-12w	*	4101
Sumner—		
Murphy et al, Tate 1, sec nw 31-32s-2e	353	3747
Woodson—		
Joe Natal et al, Ellis 1, nwc se 35-25s-14e	*	1552

*Failures; †Junked; ¶Million cu. ft. gas

West Texas Fields

Dean pool outpost test will acidize upper pay.

Humble starts test mile from Means record producer.

Yoakum County wildcat shows and continues drilling.

Midland, Texas. — After failing to show at 4935 to 4939 feet in lime, The Texas Company's D. S. Wright 1, outpost test of Dean pool, Cochran County, north Permian Basin area, plugged back to test upper shows. After shooting with 250 quarts between 4880 to 4910 feet, the test made 400 barrels of fluid, 250 barrels oil and 150 barrels salt water and b.s. Plans are to acidize the pay.

Salt water had been encountered at 4939 feet. Structurally, the well found salt water at a slightly higher elevation than the discovery well, 1¼ miles southeast.

An important wildcat stake has been driven by Humble Oil & Refining Company in Section 18-4, University Land, Andrews County, for University 1-B. This location is slightly less than a mile southeast of the same firm's Means 49, which recently set a production record for the area when it tested 6203 barrels in 24 hours. The new well is preparing to spud after digging cellars and pits.

O'Brien Defined

O'Brien production is apparently being defined by Gulf Oil Corporation's O'Brien 100, an edge location near the south line of Winkler County. After drilling to 2974 feet in lime the well produced 1800 feet of fluid, most of which was water.

In Hockley County, The Texas Company's Mallet Land & Cattle Company 1-B, a wildcat test 2 miles northwest of Slaughter pool, is a new start. Gulf Oil Corporation's Mallet Land & Cattle Company 2 is swabbing 80 barrels of cut oil after treatment with 5000 gallons of acid at 5020 feet and is expected to increase production. Snowden & McSweeney's A. Slaughter 1 is nearing prospective pay horizons and is drilling below 4450 feet in the brown lime section.

Magnolia Petroleum Company's J. H. Jynn 1, wildcat in Section 770, Gibson Survey, Yoakum County, is drilling lime at 5085 feet. This test had a fair oil show at 5068 to 5093. Another test in the area is Gulf Oil Corporation's Elliott 1, which is making free oil as drilling progresses below 5182 feet. No water is showing.

In Ector County a wildcat 3 miles north of Harper production topped the anhydrite at 1521 feet. The test is Bert Fields Inc.'s Owenwood 1, near the center of the county. Sinclair Prairie Oil Company's Moss 2-B, about 3 miles southwest of Harper pool, looked like a small well after plugging back to 4104 feet and swabbed 26 barrels in 24 hours. In Harper proper, Blackstock Oil & Gas Company completed T-P Land Trust 5 at 4168 feet, making 2616 barrels on flow after a shot of 380 quarts.

Foster pool of Ector County has been extended ¼ mile west by Hilton Oil Inc.'s Witcher 1, which topped lime pay at 3995 feet and picked up free oil in broken pay. Oil continued to increase until the test was carrying 3800 feet of oil in the hole, and drilling deeper.

Reagan County is to have an immediate test of Permian lime by John W. Emch's Texas Pacific Land Trust 1, SE Section 203, T&P Survey, about 2 miles east of Big Lake field. A depth of 2900 feet is contracted.

Midway waste hearing set for September 27

A hearing to consider waste prevention rules for the Midway field, San Patricio County, has been scheduled by the Texas Railroad Commission. The meeting is set for September 27 at Austin.

In the same order the commission ordered water to be pumped into Harlan Grimes' Coggin 1, in an effort to kill well No. 2 on the same lease which has cratered.

Operators study unitization of Cotton Valley field

Engineering and other data on the feasibility of unitizing the Cotton Valley field, which besides its original shallow production, yields oil from the Holloway (Travis Peak) at 5800 feet, and gas-distillate and oil from the lower Marine series below 8000 feet, have been collected and will be submitted at an early date to a conference of all companies operating in the field.

It is understood that the unitization

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WEST TEXAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Crane County—		
Gulf, M. B. McKnight 4	*	6558
Gilcrease Oil Co., A. Gibbs-Conoco 18	20	2337
Ector County—		
Arrow Drlg. Co., H. C. Foster 3	944	4175
Atlantic, Rumsey 6-C	431	4285
M. J. Delaney, Smith 3	616	4340
Humble, Scharbauer 20-C	*	337
Ohio, University 4	172	3670
Pantex Oil Corp., Cowden 2-C	1117	4203
Shell, Witcher 3-A	1206	4186
Texas-Pacific C. & O. Co., Foster 6	1257	4175
Gaines County—		
Continental, A. L. Wasson 1-50	914	4985
Loving County—		
Standard of Texas, Allen 8	72	4337
Taylor County—		
Charter O&G Co., J. C. Frederickson 1	5	2413
Upton County —		
Brown & Hancock, Continental-Baker 7-D	938	2291
Humble, Ricker 25-B	632	2420
Texas-Pacific C. & O. Co., Lane 11-E	282	2261
Ward County—		
Gulf, Estes 103	1657	2630
Texas-Pacific C. & O. Co., Barker 16	507	2407
Winkler County—		
Gulf, Keystone 28	585	3415
Humble et al, Walton 11-D	632	2990
Magnolia, Walton 173	1287	2933
Howard County —		
Geo. Farley, Settles 1-B	50	2494
Moore Bros., O'Daniel 2-B	568	2908
Snider 6-A	983	2825
North Central Co., Sarah Hyman 2-A	15	1314
Pecos County —		
Standard of Texas, Smith 8	614	1509
Roberts et al, Wellborn 1	*	3035

*Failures; †Junked; ‡Million cu. ft. gas.

system followed in the Van, Texas, field will be recommended. The tentative plans call for erection of an extraction plant, re-siphoning of residue gas back into the producing horizons. This has been discussed since the early days of deep production at Cotton Valley but had never reached the stage of assembling data until recently. Companies operating at Cotton Valley include Hunt Oil Company, Standard Oil Company of Louisiana, Magnolia Petroleum Company, Ohio Oil Company, Woodley Petroleum Company, Oliphant Oil Corporation (A. G. Oliphant), Stanolind Oil & Gas Company, North American Consolidated Oil Corporation, and Mid-States Oil Company.

Texas may revise production reports

A new hearing to consider revising forms for reporting oil to the Texas Railroad Commission is planned in the near future, according to V. E. Cottingham, director of production for the commission.

The need for the hearing grew out of discussion concerning Form SW-6 which arose at the pipe line overage hearing held at Austin last week.

Boosts Spokane, Washington, as coming refining center

Frank S. Henry, petroleum engineer who has been interested in Alberta oil development for the past six years, in an interview at Spokane last week predicted that a portion of the West Canadian province's oil production and that of Montana would eventually be refined and marketed through that Washington city.

"The three major oil fields already developed, namely Turner Valley, Cut Bank and Kevin-Sunburst, are estimated to be capable of an ultimate yield in excess of 600,000,000 barrels," he said. "Cut Bank has produced as high as 15,000 barrels per day, while Kevin, in 1937, was rated at some 10,000 barrels per day. Cut Bank could be brought up to 30,000 barrels per day and Kevin to 20,000 barrels, which production could be sustained for many years.

"Both of these fields formerly sold most of their production in Canada," he explained. "However, Alberta's large production closed this outlet, with the result that Kevin and Cut Bank oil was forced to find another market.

"Spokane is the largest city in close proximity to these fields, and therefore is the logical refining and distributing center for this production. This great, assured supply of oil obviously is not only sufficient to supply the two refineries now building in Spokane, but is ample to justify a pipe line from the fields to Spokane, which would mean more and larger refineries and would make of Spokane a great refinery center.

"Some of the largest American major operators, including the Standard Oil Company of New Jersey, the Standard Oil Company of California and The Texas Company, are actively engaged in oil exploration in Alberta."

Fort Worth Geological Society resumed regular meetings last week after being voluntarily inactive during the summer months.

North Texas Developments

Walnut Bend extension attempt passes up light show. Incomplete test obtained on Collinsville outpost.

Wichita Falls, Texas.—Rated as the most closely watched wildcat in North Texas, Sinclair Prairie Oil Company's Putnam 1, ½ mile northwest of the company's discovery well of Walnut Bend pool, Cooke County, was drilling in lime below 5720 feet in Ellenberger after logging slight oil shows between 5647 and 5652 feet. Salt water and a small gas show were picked up between 5399 and 5453 feet.

Putnam 1 has been running somewhat lower than the Walnut Bend discovery, although there is no correlation at its present drilling depth, as the latter is producing from Deese sandy-lime section above 4900 feet.

A wildcat failure has been chalked up in Clay County by W. H. Gant et al's B. Edwards 1, which showed early indications of opening a new pool. The well is 6 miles north of Worsham field. After drilling Ellenberger to 6354 feet where no shows were encountered, the hole was plugged back to 6057 feet where it was treated with acid, without result. Another treatment was made between 5794 and 5839 feet but the well bailed dry.

Mildred Oil Company's Neatherly 1, Charles Quillen Survey A-989, 1 mile west of the discovery well of Collinsville field, Grayson County, obtained one incomplete test of a sandy-lime zone carrying oil and gas between 3862 and 3872 feet. Casing was perforated between these points and tubing run. The well pumped and flowed 65 barrels of pipe line oil in 11 hours. Gravity was checked at 32 degrees. After lowering tubing to 3903 feet, another test was in process when the tubing became clogged and the well was shut in.

Carey & Carey's J. A. Kemp 1, a test of the deep K-M-A pay located on the south line of Wichita County, shut down at 4041 feet for orders after failing to drill commercial production.

Consolidated Oil Company's G. B. Ancell Jr. 1, Section 35, Block 6, Wilbarger County, in the narrow trend on the west of K-M-A, drilled to 4127 feet without making a well in oil sand at 4080 to 4096 feet. After bailing dry, the 4074-4096-foot section was shot and the well bridged over.

Also in this area, the same company's Griffin & Martin 1, SE NE SE H&TC Section 9, Block 7, 1 mile northwest, drilled to 3995 feet in shale. A good sand was drilled from 3967 to 3994 feet which filled the hole and headed in two hours after shot of 100 quarts. This producer follows previous predictions by adding proven acreage to the western edge of present development.

In Wichita County K-M-A, Curtis & Carraway's Mrs. Julia James 1, which was a north offset to Continental Oil Company's extensioner of K-M-A on the same farm, drilled to 4023 feet without making a well. Two sands carrying shows were drilled at 4074 to 4096 feet and 4080 to 4090 feet. However, on test the well bailed dry and the operation was shut down.

NORTH TEXAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Archer County—		
Fraser et al, Wilson 14-B, Lot 19..	*	877
Shappell Oil Co., Bell 11, blk 5...	103	1004
Sike & Johnson, Ford 1.....	*	4202
Underwood & Campbell, Campbell 29-B sec 1378	*	1031
Archer County (K-M-A)—		
H. A. Shaffer Oil Co., Ferguson 3-A, blk 15	480	3862
Staley Oil Co. et al, Mangold 4, blk 30	600	3852
Clay County—		
Bowers et al, Shumake 3, blk 4...	20	1138
Duncan & Arnold et al, Duncan 1, blk 14	45	1142
Hudson et al, Big Wichita River Bed 3	25	1112
Jo-Ellen Oil Co., Big Wichita River Bed 2	88	1113
Metzner & Burns, Thornberry 9-A, blk 6	4	210
Thornberry 10-A, blk 6.....	10	205
Cooke County—		
Murray et al, Trubenbach 7.....	*	965
Texas Co., Trubenbach 10	63	816
Trunter Oil Co., Stacy 8.....	50	764
Jack County—		
Cockburn Oil Co., Wilton 1, sec 3349	*	3210
Holmes et al, Bloodworth 1.....	*	465
Mar-Tex Oil Co., Kuykendall 7-B..	276	3238
J. H. Sewell, Sewell 2, blk 3.....	4	378
T. B. Sneed & Co., Bloodworth 4, blk 1	7	324
Tebay & Leberman, Smith 1.....¶	9¼	2839
Montague County—		
N. H. Martin & Son, Ivins 1.....	*	2301
Wichita County (K-M-A)—		
Barnard et al, Fassett-Tuttle 2...	624	4004
Bishop Oil Co., Waggoner Bros. 2-B, lot 32	770	3832
Consolidated Oil Co., James Est. 1, blk 7 .....†	1700	3983
Deep Oil Dev. Co., Kemp Est. 1-B, blk 40	25	3940
E-C Oil Co., Lewis 3-A, blk 20...	600	3858
Fain McGaha Oil Corp., Griffin 2-A, blk 3	984	3840
King Oil Co.-Perkins & Cullum, Chas. Pettit "State" 2.....	904	3907
Mitchell & Dorian, Burnett Est. 1, sec 1	*	4056
Shell, Kempner 3, blk 17.....	150	3843
Stidham & Thrasher, Seay 2.....	480	3843
Sam K. Vierson, Kempner 3, blk 19	576	3942
Texas Co., Kemp 3, blk 26.....	448	3835
Wichita County (Misc.)—		
Bell O&G Co., Willis 11, blk 1....	*	1492
Flynn et al, Proctor 1.....	*	1055
Pois & Schultz, Foster M-1.....	*	1832
Harmon & Hanlon-Buchanon, Fassett & Tuttle 12-A	35	877
Rathke Oil Co., Murray 15.....	*	882
R. W. Gutzler, Jenne 3, lot 1.....	*	510
Jenne 5, lot 1	4	241
Wise County —		
Bilbrey et al, Guess 1.....	*	1038
Young County—		
Lawler et al, Watkins 1.....	10	3805
Sams & Watson, Cullers 7	10	626
Cowboy Evans, Knox 1	*	700
E. D. Willis, Stewart B-1.....	105	850

*Failures; †Junked; ¶Million cu. ft. gas.

Panhandle interest focused on deep Ordovician test

Pampa.—Interest of Panhandle operators is centered on Sinclair Prairie Oil Company and Parcomis Oil Company's W. H. Bush Estate 1, C SW SE 23, Block 6, BS&F Survey, Potter County, which is projected to Ordovician, or 8000 feet. Holdings under the test cover 20,000 acres taken on a structural high. The well picked up gas in the dolomite section above 3530 feet, the volumes varying with hardness

of the formation. Early reports that gas increased below 3530 feet were not confirmed when an electrical log test indicated no gas below the mentioned depth. Below 3550, to 3558 feet, trouble was encountered with lost circulation and as the week closed preparations were being made to run casing. Total depth of the well is 3558 feet.

In Hutchinson County, Drilling and Exploration Company, Incorporated's R. L. Pond 8, is to be an early completion at 3093 feet. The dolomite pay was drilled from 3035 to 3093 feet to produce 1500 feet of oil into the hole.

A wildcat in Hall County, English Oil & Producing Company's J. M. Eudy, obtained a show of gas in the dolomite section and is shut down at 4000 feet, still in the pay.

East Texas Fields

Gregg County lower Trinity test passes up gas show

Tyler, Texas.—Humble Oil & Refining Company's Horton-Dickson 1, a test of the lower Trinity in Gregg County, on the east flank of East Texas field, topped the first anhydrite stringer at 5596 feet and at 6645 to 6664 feet cored dark grey shale and dense lime carrying a slight odor of gas. The test continued to core below 6732 feet in the Glen Rose section.

In Leon County, Wynne Drilling Company's Brown 1, a wildcat test, topped Pecan Chalk at 3700 feet and was drilling in sticky shale at 4350 feet. Humble Oil & Refining Company's Jane Hill, a wildcat in the Navarro Crossing area of Houston County, cored to 5965 feet in grey sand carrying salt water. A slight show of oil and gas was had at the top of the zone. Operator is running casing preparatory to perforating and testing the top section of the sand.

In the Rusk area of Cherokee County, Mayo & Bunn Drilling Company's Bowling 1, a wildcat, had base of Austin chalk at 4000 feet and cored sand 4003 to 4006 feet, and then was abandoned. One foot of medium grained sand was recovered.

Shreveport.—The Texas Company officials hope during the coming week to complete work of cutting out hung drill pipe in Claude Adams 1, Thomas Cox Survey, Panola County, Texas. Total depth is 11,303 feet and bottom of hole is said to be just below base of Permian salt logged at 11,067 feet. Elevation is 287 feet.

Arkansas Fuel Oil Company continued to test Baggett 1, Urquhart Survey, southeast outpost at Jefferson, Marion County, which in an eight-hour period flowed 120 barrels from the Gloyd horizon after two acid treatments.

In Sabine County, Texas, near Hemphill around the J. S. Lane Survey, Parker Drilling Company of Houston, has assembled 3000 acres for a 6000-foot test to start by October 5. In the same county around the Joseph Walker Survey, Buddy Lowe has assembled a block.

Southwest Texas Fields

Kelsey pool discovery produces 44.7 gravity oil.
Second oil well due soon in new La Reforma field.
Two Vicksburg trend wildcats at critical depths.

San Antonio.—South Texas' Vicksburg trend wildcats continue their successes. With two field discoveries gauged, three more tests are in sand with producing possibilities. One has a chance to open a new pool, while the other two may widen present production.

Humble Oil & Refining Company's A. K. Bass 2, San Rafael Grant, and in the southeastern portion of Jim Hogg County, was a completion through perforations at 4754 feet, flowing 37 barrels of 44.7 gravity pipe line oil in eight hours through ⅛-inch choke. The well showed a gas/oil ratio of 1600 to 1, with pressures of 1170 pounds on tubing and 1480 pounds on casing. It opened the Kelsey pool. Sand was logged 4730-48 feet with perforations made 4744-48 feet.

Strike in Starr County

More than 12 miles to the south and in Starr County, McKinney pool, which may ultimately be merged with the Kelsey area, was opened by Sun Oil Company's Mrs. A. McKinney 1, Section 242. The well flowed 182 barrels of 43.9 gravity oil in 24 hours through 5/32-inch choke with pressures of 730 pounds on tubing and 990 pounds on casing. Gas/oil ratio was 640 to 1. The test logged sand 4842-58 feet and was completed through perforations at 4853½-56½ feet.

Magnolia Petroleum Company apparently has a second producer in the newly discovered La Reforma field in northeastern Starr County, 6 miles east of the Sun discovery. The test, 1800 feet southwest of the field's initial distillate producer, encountered the sand at 5924 feet, cutting 1 foot of gas sand, 3 feet of shale, then 14 feet of oil sand to 5942 feet. Drill stem tests through the section failed, and casing has been set.

Jim Wells County, where the fire of the present Vicksburg heated campaign began, has a couple of tests at critical stages. Gulfboard Oil Corporation and Mills Bennett Production Company's Forry 1, approximately 1½ miles northeast of the Alice field, was in the Vicksburg sand at 5291-94 feet. The first test failed and a second was run late in the week.

EAST TEXAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Joiner Area—		
Hollandsworth Drlg. Co.-L. L. Travis, Oddfellows Lodge 1 (65/100-ac)	6000	3803
Humble, Mullikin 24 (166.4-ac)	7500	3749
Owens, Tr. (was A. P. Cary), Redwine 7 (34-ac)	80	3568
Sinclair Prairie, R. G. Wright 19 (127.62-ac)	2400	3744
Kilgore Area—		
Shell, Watson 79 (385.2-ac)	9000	3707
Wardlaw et al, J. S. King 4, blk 117	3600	3560
Longview Area—		
Arkansas F. O. Co., McKinley 11-C (54.47-ac)	5400	3608
Cities Service, Akin 21 (100-ac)	9000	3631
Spurrier 10 (52.23-ac)	8500	3625
Cushing Drlg. Co.-Joe Long, Owens 30-A (208-ac)	2400	3608
Owens 38-A (208-ac)	2000	3585
Humble, Edwards 13 (73.3-ac)	6000	3700
Shell, Basham 11 (54-ac)	9500	3682
Stinchcomb 19 (89.76-ac)	5000	3532
Stanolind, McKinley 64-B (60.7-ac)	6000	3632
Stanolind-Tide Water, Key 18 (90.6-ac)	9600	3645
Tide Water Associated, Castleberry 31 (202-ac)	2500	3601
Wood et al, Sanders 3 (6.37-ac)	3600	3601
Anderson County (Long Lake)—		
F. H. E. Oil Co., Morrow 1	75	5338
Stanolind, C. Carter 1	102	5287
Freestone County (Cayuga)—		
J. Collins, Harwell 9	194	4016
Henderson County (Cayuga)—		
F. M. Allison, Wathen 3	293	4116
Henderson County (Flag Lake)—		
Texas Co., Tarkington 1	¶45	3032
Marion (Jefferson Rodessa) —		
Arkansas F. O. Co., Houston 1, A. D. S. Coy sur	¶65	6093
Gulf, Grubaugh 1, John Hanks sur	507	6123
Hollandsworth Drlg. Co., Davis 1, William Smith sur	528	6082

*Failures; †Junked; ¶Million cu. ft. gas.

Shattel prospect may produce in Austin chalk

San Antonio.—Shattel in Frio County, one of the highly touted prospects in South Texas, apparently is going to pay off with a good producer. Humble Oil & Refining Company was preparing to run casing after finding saturation in the Austin chalk and recovering 2500 feet of green light oil on a 25-minute drill stem test at 4720-85 feet.

This well topped Austin chalk at 4685 feet and was exactly 100 feet in the formation when completion was decided upon. Elevation is 516 feet, derrick floor.

Keeran now producing from below 7000 feet

Corpus Christi.—Deeper producing zones further expand South Texas Gulf Coast's crude reserves. Keeran, Victoria County, was added to the list of fields producing below 7000 feet by Barnsdall Oil Company's Keeran Ranch 1, coring oil sand 6991-7003 feet and preparing to place on production. The test is 4300 feet north and west of present production and is on a 3000-acre lease held by Barnsdall and associates.

On a drill stem test, using a 900-foot water cushion, the well recovered 200 feet of oil. It started flowing at the end of 6 minutes and developed 200 pounds of working pressure. At 10½ minutes

the pressure had built up to 450 pounds. This test was at 6991-7003 feet. Another report is that the well was cored to 7022 feet and on drill stem test recovered 1000 feet of 40 gravity pipe line oil and developed 1000 pounds pressure in 25 minutes.

One-fourth mile west of the discovery well in the newly discovered West Ranch field, Jackson County, Magnolia Petroleum Company has commenced West Ranch 4-A, headed for the 5080-foot Greta sand.

LaRosa to Be Busy

A pool expected to receive an extensive development program is LaRosa in Refugio County, where Copano Oil Company's B. D. Rooke 1 recently opened Frio sand crude oil production. The discovery well flowed 118 barrels of 39.8 gravity oil per day through ⅛-inch choke after perforating casing at 5902-5½ feet with 20 shots. Pressures were 1775 pounds on tubing and 2375 pounds on casing. Several locations have been made and two rigs are running.

In the Saxet field, Nueces County, Richardson Petroleum Company's Cain & Sechrist 24, Block 23, coring near 9500 feet, is the deepest well ever drilled in the field. Union Producing Company's Minnie Brown 1, Agua Dulce deep test, was drilling at 10,900 feet in heaving shale.

Deepen Sisterdale test to take in more Ellenberger

San Antonio.—Failing to establish satisfactory production, Millican and Norman are deepening Willie Werner 1, wildcat on the Sisterdale prospect in Kendall County. The well had pumped 115 barrels of oil and 25 percent salt water on a 24-hour Railroad Commission test from 908-44 feet in the Ellenberger limestone after acidizing. The test, still showing considerable oil along with some salt water, is in the Torrey Survey No. 781, where several other shallow Ellenberger tests have shown oil.

Kimble County has a wildcat, apparently in the Ellenberger, which is showing for a producer. The test is Plateau Oil Company's Bolt 1, ½ mile southeast of the company's original operation. It is in limestone at 1420-35 feet and is being completed.

Mirando district's eighth field for 1938 discovered

Laredo.—Mirando District's eighth oil field of 1938 was uncovered late in the week by William H. Spice et al's H. C. Edrington Estate 1, NE NW Section 57, McMullen County. The well cored Government Wells sand at 2492-2517 feet and shale to 2519 feet and was waiting on cement after landing the pipe atop the formation.

On a drill stem test at 2492-98 feet, it recovered no oil nor mud, but flowed some gas under pressure of 240 pounds in 17 minutes. Shut in bottomhole pressure at that level was 800 pounds. A second drill stem test at 2507-19 feet failed, and a third at 2509-19 feet recovered 120 feet of oily mud, about 50 percent oil, no water and no pressure in 30 minutes. The sand showed good porosity, but had only about three percent saturation, rather low for the area.

This discovery follows the Government Wells-Seven Sisters trend and indicates that more oil production in this horizon may be found through southeastern McMullen County.

After Muson Oil

In the meantime, a hot drilling play is getting underway in the 1200-foot Muson area of Southwest McMullen County. Production is coming from the Mirando sand, and the several wells thus far completed have pumped an average of 100 barrels per day each.

V. G. Schimmel was completing Kountz 1-A, NW Section 5, McMullen County, second prospective producer in the San Jose Cole sand field. The test is in oil sand at 1173-86 feet. The first test made a gasser spraying a little oil at this level.

Sun Oil Company's J. R. Brueggemann 1, Section 288, 1320 feet south of the Fitzsimmons pool, Duval County, cored gas sand at 4273-82 feet, shale at 4242-85 feet, and oil sand at 4285-89 feet, casing being landed on bottom. Perforations were being made as the week closed.

SOUTH TEXAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
CORPUS CHRISTI DISTRICT		
Aransas County—		
Conservative, Dunn 2, Aransas	900	7165
Bee County—		
Ann, Smith 2-A, Plummer	50	3042
Calhoun County—		
Humble & Plymouth, Marshall 8, Heyser	600	5484
De Witt County—		
Hines' Boothe 1, Swindel sur	*	3505
Hidalgo County—		
Weekly, George 7, Samfordyce	325	2870
Jackson County—		
Magnolia, Drushell 2, Cordelle	450	2654
Jim Wells County—		
Bowles, Ragland 3, Alice	800	5263
Bryant, Stillwell 1, Alice	650	5279
Buchanan & Blanco, Rattan 3, Alice	750	5305
Howell, Lindsay & Reed 19, Alice	550	5295
Stillwell 1-A, Alice	600	5308
Southwood, Stillwell 1, Alice	500	5290
Texas Gulf, Stillwell 2, Alice	500	5287
Lavaca County—		
Midway, Graff 1, Jack survey	*	6273
Live Oak County —		
Grimes, Gaston 1, Simmons subd.	*	1779
Nueces County—		
Hiawatha, Smith 3-B, Saxet (perf 6873-76 ft)	250	7378
Killam, Ellick 7, Clara Driscoll	450	5528
Pan American, Sevier 1, Clara Driscoll	350	3811
Renwar, McKinzie 4, Turkey Creek	650	5811
Southern Minerals, French 2, Turkey Creek	400	3863
Western Gulf, Hunter 1, Saxet	77	4904
Refugio County —		
Copano, O'Connor 16-B, Tomoconnor	800	5920
O'Connor 29-B, Tomoconnor	1450	5930
Coronado, Rooke 1, La Rosa	450	5960
Hewitt & Dougherty, Lambert 76, Tomoconnor	375	5907
Lambert 77, Tomoconnor	1400	5911
Houston, Pratt-Hewitt-Rooke 54, Refugio	625	6253
Quintana, O'Connor 71-A, Tomoconnor	1800	5930
San Patricio County—		
Grote, Tedford 1, McCampbell (perf 7118-26 ft)	500	7145
Morgan, Smith 1, section 23, Pauls subd	*	5616
Plymouth, Nelson 4, East White Point	700	5677
Welder 102-C, Plymouth	475	5894
Welder 103-C, Plymouth	500	5860
Victoria County—		
Gulf, Bonner 4, Heyser	125	6059
LAREDO DISTRICT		
Duval County—		
Arkansas, Rossi 12, North Sweden	320	3910
Buchanan, Foster 4-B, Eagle Hill	90	1523
Continental, Collings 1, Hoffman	50	2808
Driscoll 26-A, Driscoll	325	3360
Daubert & Gorman-Yoakam, Corbett 1, sur 176	*	1253
Fitzsimmons, Fitzsimmons 1, sur 293	*	lcn.
Gulf Stream, Rodriguez 12-A, Seven Sisters	110	1520
Rodriguez 13-A, Seven Sisters	155	1508
Rodriguez 14-A, Seven Sisters	138	1504
Houston, Fitzsimmons 2, Fitzsimmons	750	4313
Magnolia, Duval Ranch 1, sec 81	*	2194
Well 12, Hoffman	250	2810
Porter, Fitzsimmons 2-B, Fitzsimmons	425	4393
Schimmel, Foster 3, Eagle Hill	60	1527
Stewart & Nye, Peters 1, Rancho Solo (perf 1853-56)	105	3200
Texas, Meek 2, Seven Sisters	90	2685
Wagner, Lampe 1, Hoffman	250	2810
Jim Hogg County—		
Hamilton, Holbein 1, Las Animas gr	*	3514
Henshaw, Martinez 1, sec 38	*	3023
Humble, Bass 2, Kelsey	500	4754
McMullen County—		
Bishop & Albright, Nueces 2-A, Munson	100	1213
Starr County—		
Sun, McKinney 1, McKinney	500	4858
Zimmerman, Starr 1, por 89	*	3008
Webb County—		
O'Byrne & Atkinson, Lacy 1, sur 2050	*	2522
Zapata County —		
Gilcrease, Haynes 26-B, Comitas	65	1103
Kirkwood & Morgan, Hinnant 2, Mirando Valley	115	1881
Texas, Jennings 120, Escobas	12	1250
SAN ANTONIO DISTRICT		
Caldwell County—		
Banks Miller, Martindale 1, sur 18	*	3225
Wiegand, Briscoe 4-A, Salt Flats	50	2708
Guadalupe County—		
Texas, Willie 8, Darst Creek	150	2677
Kimble County—		
Dawson, Wilkinson 2, sur 24	*	350
Milam County—		
Tuxedo, Graves 1, Robertson sur	*	1510
Travis County—		
R. F. C., Jones 1, Hornsby sur	*	1380

*Failures; †Junked; ¶Million cu. ft. gas.

Texas drilling permits jump to 367 for week

The Texas Railroad Commission last week approved permits for drilling 367 new wells in Texas, 251 more than were allowed the week before.

Permits were approved for drilling 49 new wells in the East Texas field, including 37 in Gregg, 9 in Upshur, and 3 in Rusk County. Sixteen locations were approved in the remainder of the East Central Texas district.

There were 45 permits approved in the West Texas district, including 10 in Ector and 10 in Howard County. West Central Texas operators reported 23 new locations.

The commission approved 71 permits in the Gulf Coast Section, with 20 in Harris County, while operators from Southwest Texas reported 68 locations, including 31 in Duval and 10 in Webb County.

There were 74 new locations reported from North Texas, including 66 in Wichita County, while operators in the Panhandle reported 21 locations with 11 in Hutchinson County.

Hardin prorated on basis of 15 acres per well

Assignment of 15 acres to the well for proration purposes in the Hardin field, Liberty County, is provided in an order issued by the Texas Railroad Commission last week.

The old order permitted assignment of only 10 acres to the well, requiring the drilling of wells on small fractional units to obtain full acreage allowances. Proration in the field is based on acreage and per well, with 50 percent allocated on each factor.

Texas Gulf Coast

Matagorda County field opener makes 300-barrel flow.

Second Fairbanks extension showing high on structure.

Houston.—New oil production was definitely established north of Markham, Matagorda County, last week when Ohio Oil Company completed W. P. Cornelius 1, P. C. Yarborough Survey, in lower Frio formation at 7730 feet. The well made 169 barrels of fluid in 12 hours, 85 percent oil and 15 percent basic sediment and water, through 3/16-inch choke. Tubing pressure was 950 pounds and casing pressure was 1300 pounds. It was completed after casing was perforated with 8 shots from 7727 to 7730 feet with no salt water. The oil tests 33.5 gravity.

North Markham is the first discovery by Ohio Oil Company in the Texas Gulf Coast. The area first was worked with reflection seismograph and the company has lease on several thousand acres.

Northeast of production at Palacios, Matagorda County, Glenn H. McCarthy abandoned Moffett et al 1, S. B. Perkins Survey, at 9010 feet after coring broken formations with a salty taste. No shows of oil or gas of importance were reported.

On the northwest side of Orange field, Orange County, Red Bank Oil Company has completed Michel 7, W. Dyson Survey, flowing 218 barrels of 41.8 gravity oil daily through ¼-inch choke; tubing pressure 950 pounds and casing pressure 900 pounds. A new sand was cored and 7-inch casing set at 5576 feet and perforated from 5569 to 5575 feet with 12 shots. The company has made location for First National Bank 1, 150 feet each way out of the southeast corner of a 6.25-acre tract in the Wm. Dyson Survey.

Red Bank Oil Company and Thompson are completing Duhon 1, W. Dyson Survey, at Orange. Oil sand was logged from 5740 to 5747 feet and 5½-inch casing was set on top of the sand. Screen and liner have been run.

Gulf Oil Corporation has made location for Orange National Bank 2 at Orange. It is 250 feet west of Orange National Bank 1 in the W. Dyson Survey.

Gulf Oil Corporation completed the second well in the deep sand at Segno, Polk County, last week. S. F. Wing 12, I&GN Section 13, came in flowing 653 barrels of 37.1-gravity pipe line oil daily through ¼-inch choke from 8111 to 8118 feet after casing had been perforated with 24 shots. Tubing pressure was 1275 pounds and casing pressure 1550 pounds. Wing 13 made 441 barrels daily from 5197 feet.

On the east side of Segno, Humble Oil & Refining Company was trying to complete its first well in the deep sand. Kirby 9-B was swabbing after perforating from 8103 to 8110 feet.

Near Deweyville, Newton County, Republic Production Company abandoned Sabine Tram Company 1, I. Garner Survey, at 7032 feet, reporting no shows of importance.

About 2000 feet northeast of Stanolind Oil & Gas Company's Look 1, which extended Fairbanks field, Harris County, 4400 feet east, the company's Schumacher 1, J. Doswell Survey, at the end of the week was coring gas sand at 6948 feet, topped at 6940 feet. It is higher on structure than Look 1.

On the northeastern side of Fairbanks, D. W. Moore and T. S. Ahern's Whithead 1, W. S. Powell Survey, was preparing to make a test at the end of the week. Oil sand was topped at 6839 feet and the hole was carried to 6853 feet where 5½-inch casing was set at 6853 feet.

Three-fourths mile northwest of production at Eureka, Harris County, Jack Frazier discovered a new sand in L. Lackner 1, and after making a production test and showing a little salt water because of a bad cement job the hole has been killed. Casing was perforated from 8085 to 8095 feet with 24 shots. It came in making an estimated 25 barrels of fluid per hour, 22 percent salt water and 78 percent high gravity oil. The fluid was flowing through ¼-inch choke and tubing pressure was 1550 pounds and casing pressure 1900 pounds. After perforations have been squeezed with cement the well will be perforated again at the same depth. The same operator's Helberg 2 is flowing into storage, no gauge. The well was drilled to 7737 feet and oil sand cored from 7696 to 7725 feet. It was perforated from 7695 to 7710 feet with 30 shots.

Means & McGehee's Lackner D-1 (Eureka) was being tested at the close of the week. Oil sand was cored from 7692 to 7721 feet. Five-inch casing was set at 7735 feet and was perforated.

Humble Oil & Refining Company abandoned another one of its "core tests" in the Gulf Coast. This test was at Crosby prospect, Harris County. Keller 1-A, Wm. Whilock Survey, was carried to 8000 feet in shale.

On the west side of the first field discovered in the Texas Gulf Coast, Spindletop, Merit Oil Company and British-American Oil Company have made location for a deep Frio test. Gladys City Oil Company 1 is 150 feet from center of lines of street which borders block 138 in the Gladys City subdivision on the north and west and in the J. A. Veatch Survey, and is approximately 1800 feet from production. On the northeast flank of the field, Unity Oil Company abandoned Greer-Nall 1, J. A. Veatch Survey, at 3960 feet. It is believed to be in salt.

South of the discovery well at Cheek, Jefferson County, Shell Petroleum Corporation's Ed. Pleasant 1, C. Hillebrand Survey, was making 15 barrels of 52.9-gravity oil daily and 1,500,000 cubic feet of gas through a 3/16-inch choke. Tubing pressure was 2200 pounds and casing pressure 2300 pounds. Pleasant 1 was perforated at 7715 feet.

West of Cotton Lake field, Chambers County, F. A. Gillispie made location of Kirby Petroleum Company 1, 1162 feet east of the west line and 466 feet north of the south line of a 210-acre tract in the Chambers County School Land Survey.

At Green's Lake, Galveston County, Sun Oil Company was rigging up a separator on Houston Farms Development Company 2, D. Buckley Survey after it came in making gas and distillate. After the fluid has been turned through the separator a gauge will be announced. Houston Farms 2 was perforated from 6808 to 6818 feet with 15 shots, and it came in through a ⅛-inch choke. Tubing and casing pressure was 2200 pounds.

TEXAS GULF COAST
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Anahuac—		
Gulf, Syphrett 2	154	7138
Humble, Johnson 21	682	7095
Batson—		
J. A. Deering, Cruse 1	360	5509
Dickinson—		
Atlantic, Frederick 2	397	8135
Esperson—		
Gulf, Moores Bluff 31	418	2613
Fairbanks—		
Amerada-Stanolind, Marietta 2	336	6844
Smith & Owenby, Gibson 4	647	6860
Windsor Oil Co., Ley 6	654	6839
Ley 1-B	645	6845
Friendswood—		
Humble, Kiesling & Dixon 5	629	6060
Leblue 1	672	6047
Owens 2	593	6048
Whitcomb 3	648	6047
Hardin—		
Humble, Johnson 1	152	7700
Hastings—		
Humble, South Texas Grain 11	94	6123
Stanolind, Autrey 8	456	6080
Paul 26	574	6078
Humble—		
J. Deering, Cicero 2	*	2325
Magnet—		
Wolfe & Gray, State 1	65	5534
Orange—		
Red Bank, Michel 7	518	5575
Palacios—		
Glenn H. McCarthy, Moffett et al	*	9010
Pickett Ridge—		
Texas Co., Nilson 5	85	4709
Segno—		
Gulf, S. F. Wing 12	653	8118
Silsbee—		
General Crude, Carraway 2	547	6920
Spindletop—		
Stanolind, McFaddin 150	269	4070
Unity Oil Co., Greer-Nall 1	*	3960
Thompsons—		
Humble, Lockwood Sharp B-X-34	¶½	3450
Tomball—		
Humble, Michel 2	501	5555
Van Vleck—		
Skelly, Johnson 3	427	8245
West Columbia—		
Mike Hogg, Fee 3	560	5516
Texas Co., Abrams 25	473	5409
Withers—		
Blankline Oil Co., Broussard-Stovall 1	198	5548
Harris County—		
Humble, Kellar 1, Crosby area, Wm. Whitlock sur	*	8000
Liberty County—		
Wallace Oil Co., League 1, Davis Hill, M. De Los Santos sur	*	5612
Newton County—		
Republic, Sabine Tram 1, nw Starks, I. Garner sur	*	7032

*Failures; †Junked; ¶Million cu. ft. gas.

Louisiana permits

Shreveport.—Seventeen drilling permits were authorized last week by the Louisiana Conservation Commission, of which 8 were in North Louisiana, divided among the following parishes: Bossier 1, Caddo 1, Claiborne (Lisbon) 2, Red River 1, Sabine 2, Union 1. Nine were issued for South Louisiana, divided among the following parishes: Acadia 1, Ascension 1, Calcasieu 2, Evangeline 1, Iberia 1, St. Mary 1, Terrebonne 2.

South Louisiana

Wildcat south of Houma shows salt water on test.

Gibson outpost is preparing to test at 8880 feet.

Texaco will try to open new sand at Four Island.

Lake Charles. — South of Houma, Shell Petroleum Corporation's Peters 1, wildcat in Section 75-18s-18e, showed salt water and oil on a drill stem test at 10,166 feet last week; it will be drilled deeper. Peters 1, cored from 10,112 to 10,113 feet, recovered sand with an odor and cut of oil. Cores from 10,113 to 10,157 feet also showed sand and shale with odors and cuts of oil. A 3¾-minute drill stem test from 10,120 to 10,157 feet showed a 700-pound pressure and ⅓-barrel of distillate. Cores taken from 10,157 to 10,167 feet showed oil sand. No shows were reported from 10,167 to 10,168 feet, but from 10,168 to 10,172 feet was sand showing oil. A drill stem test with the seat at 10,166 feet showed 95 stands of fluid, of which a half stand was mud, 10 oily mud, and 55 stands salt water.

At Coon Point salt dome, Terrebonne Parish, The Texas Company has made location for State 2, over a mile south and west of the first well drilled in the area. It is in Caillou Bay and in 22s-14e.

Outpost Testing Again

Three fourths mile south of production at Gibson, Terrebonne Parish, Shell Petroleum Corporation's Kuntz 1, Section 40-17s-15e, was preparing to test at 8880 to 8885 feet. A test from 9093 to 9095 feet showed salt water and the hole was plugged back to 8900 feet. The hole was originally drilled to 10,752 feet in shale, the deepest ever drilled at Gibson. If it is productive in the 8880-foot horizon it will open a new sand for the field.

The Texas Company will attempt to open a new oil sand at Four Island field, Terrebonne Parish, when State Four Island 10, Section 24-21s-16e, is tested. Drilled to 9243 feet in shale, after an electrical log was run a string of 9⅝-inch casing was set at 6775 feet. The deepest producing horizon in the field is slightly below 5800 feet.

At Bay St. Elaine field, Terrebonne Parish, The Texas Company is searching for a new oil sand in State Bay St. Elaine 18, Section 18-22s-18e. The crew is drilling at 6631 feet in shale; at 6585 feet it attempted to blow out.

At Lake Barre, Terrebonne Parish, The Texas Company is searching for a new sand in State Lake Barre 42, Section 40-21s-19e. Down to 10,900 feet, it is the second deepest well ever drilled in the field and is several thousand feet below the established producing horizon.

Extension Indicated

William Helis et al's Harry Nelson 1, Section 36-7s-1w, indicates it will extend the South Baton Rouge field, East Baton Rouge Parish, 1800 feet southeast and become the third producer for the field. Last week the well cored oil sands and 7-inch casing was set at 6472 feet. On a drill stem test with the seat at 6470 feet the well showed 15 joints of pipe line oil, one joint of sand and no salt water through a quarter-inch choke in four minutes. The working pressure was 70 pounds and the gravity of the oil was 37 degrees at 84 degrees F. The same operator's Louisiana State University 2-A, Section 66-7s-1w, down to 7600 feet, is preparing to abandon.

Due to the lack of storage and oil transportation facilities Sun Oil Company has placed Dibert, Stark and Brown 1, discovery well at Chacahoula dome, Lafourche Parish, on a ⅛-inch choke. It is making eight barrels per hour, with a tubing pressure of 1000 pounds and a casing pressure of 850 pounds, from sands at 7253 feet. Sun Pipe Line Company is laying a 6-inch line from the two 500-barrel storage tanks to Black Bayou, where the oil will be barged out.

To Perforate Deep Well

Amerada Petroleum Corporation and Louisiana Land & Exploration Company will try to open a new oil sand at Raceland field, Lafourche Parish, in South Coast Corporation 2, Section 34-15s-19e. The hole has been cleaned to 12,164 feet and the crew is preparing to perforate casing from 12,049½ to 12,120 feet. A short string of 4¾-inch casing was set from 10,189 to 12,164 feet.

On the flank of Valentine and 500 feet north of Valentine Sugars 2, William Helis completed Valentine Sugars 3, Section 2-17s-20e. It made 750 barrels daily through a quarter-inch choke with a tubing pressure of 250 pounds; casing was sealed. The well was completed in oil sands from 7372 to 7387 feet.

About 1320 feet west of the discovery well at Grand Bay, Plaquemines Parish, Gulf Oil Corporation was preparing to complete Grand Prairie Levee District 2-A, Section 48-20s-18e. Cement plugs are being drilled at 6148 feet. A drill

[*Continued on page 88*]

SOUTH LOUISIANA
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Big Lake—		
Union Sulphur, P. D. Hebert 1....	*	9289
Darrow—		
Southern Drillers, Inc., Berteau 1	*	7744
Garden Island Bay—		
Texas Co., State 28.....	*	6777
Jennings—		
Noble & Baker, Prather 1.....	390	7456
Lafitte—		
Texas Co., Madison Realty 3.....	1388	10,134
Starks —		
J. R. Turnbull, Industrial Lbr. Co. 4	*	3515

*Failures; †Junked; ¶Million cu. ft. gas.

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Cotton Valley—Greggton
Houston

North Louisiana Fields

Shreveport well wild following blowout from Tokio sand.

"D" sand extension attempt at Cotton Valley shows.

Shreveport.—Shreveport's new field last week had its first experience with handling a gas well, which was out of control, when R. L. Bauman's Slattery 1, NW NW 35-18n-14w, almost in the Shreveport city limits, blew out while drilling at 2550 feet, and was still out of control two days later. The gas is believed to be coming from the Tokio. Its volume has been variously estimated at 15 to 40 million cubic feet daily.

Oil men saw in the blowing out of gas at this level the possibilities of shallow gas, or possibly down dip oil production. The well is about ¾ mile southeast of R. E. Allison's Ellerbe 1, SW NW 27-18n-14w, recently completed in basal Glen Rose lime as an oil producer. Bauman's test logged Nacatoch at 953 feet, topped chalk at 1270 feet, and topped hard chalk at 1400 feet.

Another location for the Shreveport field was made last week by Hollywood Oil Corporation (Smitherman and associates) at C. & B. Realty Company 1, NE NE 22-17n-14w, 5 miles south of Allison's producer. It is on a block of 1500 acres and is just outside the city limits to the south.

Southeast of Shreveport and 6 miles southeast of the discovery well, F. W. Martin and Superior Oil Corporation set 9⅝-inch casing at 4046 feet in Andrew Querbes, irregular Section 37-17n-13w.

The Lisbon field for the first time is without a drilling operation. Completion of an oil well and abandonment of a dry hole marking limits of production to the west, left the field without an operation that is making hole. This is the first time this has been the case since the first well was completed December 25, 1936. The field, which to August 1, 1938, had yielded 4,629,101 barrels of oil, now has 266 wells, of which 86 are on some form of artificial lift.

The well abandoned and marking limits of the producing area to the west is J. H. Henry's McDonald 1, SE SW 3-20n-5w. One other well is waiting on final string of casing to set. Long & Wolff of Tyler plan to drill a west offset to E. T. Oakes' Kilgore 1, NW SE 28-21n-5w, 1½ miles northwest of Lisbon production, location to be in NE SW 28-21n-5w. Oakes' test, which logged 13 feet of saturation, had casing trouble and has been acidized several times. It had made considerable oil, but present hole probably will be abandoned after electric log.

DeSoto Oil & Gas Company last week set 7-inch casing at 5390 feet in Mrs. B. A. Fleming 1, NW NW 18-16n-9w, Bienville Parish wildcat, to test producing possibilities of the Pettit (basal Glen Rose) lime. Total depth (revised) is 5522 feet. Elevation is 226 feet. The well has logged several showings in the Glen Rose. It is 2 miles east of the same company's two gas-distillate wells in the Lake Bisteneau field.

Tropical Oil Company's Long-Bell Lumber Company 1, SE SE 5-8n-13w, wildcat test between the Converse and Zwolle shallow fields, drilled ahead last week at 3390 feet after showing 80 feet of mud and a little gas in a 10-minute drill-stem test from 3192 to 3254 feet, with ¾-inch chokes used at top and bottom of testing tool.

Arkansas - Louisiana Gas Company was rigging up for an east offset to the 6100-foot gas-distillate discovery well in the Driscoll field, Bienville Parish. The new test is Davis Lumber Company B-1, NW SW 7-16n-4w.

Northwest of the discovery well of the new Shreveport field in Section 27-18n-14w, W. L. McClanahan has taken 3000 acres for a 6000-foot test to be drilled immediately in Section 30-19n-15w, Caddo Parish. In the southeast corner of Township 19 North, Range 10 West, southwest of the Cotton Valley field, Webster Parish, J. F. Barron has assembled a 5000-acre block.

Continental Oil Company's Singer Manufacturing Company 1, NE NW 3-15n-11e, Madison Parish wildcat, drilled ahead at 4095 feet. Zwolle Syndicate continued testing Mansfield Hardwood Lumber Company 1, NE NE 8-7n-14w, Sabine Parish, 2½ miles northwest of Blue Lake (West Zwolle). Total depth is 4325 feet.

Deepest at Cotton Valley

Penetrating farther into the Lower Marine horizon than any previous test in the deep Cotton Valley field, Webster Parish, H. L. Hunt last week was preparing to perforate casing and test the "D," "E" and "F" sands of the lower Marine series in Babb 8, SW SW 13-21n-10w, with total depth of 9002 feet.

This hole went over 700 feet below the Bodcaw "E" sand, the regular producing horizon in Cotton Valley. It logged the Bodcaw from 8260 to 8302 feet after topping the "D" sand at 8170 feet. The Davis or "F" sand was logged from 8352 to 8357 feet.

Extension of "D" sand production in the lower Marine at Cotton Valley, a mile southwest appeared assured last week as Standard Oil Company of Louisiana's Stewart 1, SE SE 32-21n-10w, flowed 155 barrels of oil by heads in 24 hours through ⅜-inch choke. Testing was still underway Thursday. This test, drilled before discovery of oil down dip on the southeast, south and northwest flanks of the Cotton Valley structure, originally was completed in the "E" or Bodcaw series of the lower Marine as a gas-distillate producer. Recently in view of the "D" sand having been found to carry oil on the flanks, it was decided to plug back hole and test the upper horizon for oil. The hole was plugged back to 8530 feet, cement retainer set at 8554 feet and the "D" section perforated with 60 shots from 8512 to 8522 feet. Nearest "D" horizon crude production is Mid-States Oil Company's Welori Lumber Company 1, NW NW 3-20n-10w.

The Shreveport Geological Society will resume its monthly meetings at Shreveport Friday night, October 7. B. W. Blanpied is president.

NORTH LOUISIANA Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Claiborne (Lisbon)—		
J. H. Henry, B. W. McDonald 1, 3-20-5	*	5354
Magnolia, Loyd 4, 2-20n-5w	819	5385
Claiborne (Sugar Creek)—		
Union et al, A. J. Hodges 1, 6-19-5	¶4	5700
De Soto (Wildcat)—		
Collins et al, Joyner 2, 28-11-12	*	3001
Webster (Cotton Valley)—		
H. L. Hunt, Hope 21, 24-21-10	1032	5871

*Failures; †Junked; ¶Million cu. ft. gas.

Arkansas Fields

447 barrels in 22 hours in Second Magnolia oil well

El Dorado, Ark.—Following immediately in the wake of abandonment of two dry holes to the east and west of the discovery well, Grady H. Vaughn and Shell Petroleum Corporation last week completed the second oil producer for the Permian lime oil producing field at Magnolia, Columbia County, Arkansas.

The new producer, ½-mile southeast of Kerr-Lynn Oil Company's discovery well in the area, is Nan Garrett 1, NE SE 14-17-20, completed flowing 522 barrels of fluid of which 447 barrels was oil, in first 22 hours through ¼-inch choke. Tubing pressure was 1350 pounds and casing pressure, 750 pounds. The well on a subsequent 22-hour gauge before being cut back to the 200-barrel per day allowable, showed 534 barrels of 38.7 gravity oil through ¼-inch choke. Total depth is 7553 feet and saturated Permian lime was logged from 7514 to 7528 feet and from 7539 to 7552 feet. Operators immediately began rigging Levi Garrett 1, an east offset to the new producer.

Just outside of production to the southwest at Schuler, Union County, and in the direction of a recent dry hole that marked limits of production in that direction, Jones, Murphy and Hurley last week completed Gallagher 1, Lot 4, NW SW 19-18-17, from 38 feet of Jones (Lower Marine) sand, flowing 85 barrels per hour through 1-inch choke. Casing was perforated with 100 shots from 7590 to 7610 feet.

ARKANSAS Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Columbia (Magnolia)—		
Atlantic, Harrington 1, 14-17-20	*	7789
G. H. Vaughn, Garrett 1, 14-17-20	567	7553
Nevada (Wildcat)—		
Texas Canadian, Stocks 1, 9-15-22	75	3650
Union (Schuler)—		
Crescent Drlg. Co., Lewis 1, 16-18-17	1781	7584
Jones, Murphy & Hurley, Gallagher 1, 19-18-17	2040	7610

*Failures; †Junked; ¶Million cu. ft. gas.

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EASTERN FIELDS
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
OHIO		
Ashland County—		
Harmon et al, Charst 1	¶1.50	3280
Athens County—		
Kachelmacker Estate, N. Y. Coal Co. 3	*	1076
Guernsey County—		
Hartman O&G Co., Hunnell 4	¶	1059
Licking County—		
Hazlett et al, Moorhead 2	65	3147
Settles et al, Shannon 6	10	760
Allen et al, Wright 2	2	732
Stricker et al, Davis 1	¶.13	621
G. H. Long, Ashcraft 4	¶.10	2955
Medina County—		
Wm. Dempsey, McCrea 1	¶1.00	2597
Noble County—		
Turkey Run O&G Co., Fleeman 6	¶	1111
Stark County—		
White Prod. Co., Holbenor 1	¶2.00	4577
Summit County—		
Burtner, Morgan & Stevens 1	¶2.50	4120
Trumbull County—		
Johnston et al, Porter 1	*	4150
Washington County—		
Rex O&G Co., Whittacre 6	4	1435
Hix Oil Co., Fisher 2	¶.21	1673
Wayne County—		
Winger et al, Galehouse 1	¶.21	3531
WEST VIRGINIA		
Calhoun County—		
Garrett & Garrett, Fogel & Wilson 3	3	1725
Gilmer County—		
McCall Drilling Co., Gainer & Ellyson 1	¶.03	1960
Kanawha County—		
United Fuel Gas Co., Glass 4791	¶11.31	5128
West Va. Gas Corp., Spencer-Canterbury 1	¶4.48	5033
Marshall County—		
A. C. Phillips, Wellman 1	*	3395
Monongalia County—		
Morris O&G Co., Peninsula Co. 1	¶.04	1770
Pleasants County—		
Hart Oil Co., Hart 1	3	1700
Carmichael, Wells 2	*	905
Ritchie County—		
Schultz Oil Co., Hammett 3	200	1950
Wayne County—		
Chartiers Oil Co., Saunders 2	¶.22	3741
Wetzel County—		
McIntire et al, Parsons 1	¶1.66	1091
Henthorn, Phillips 1	¶.25	580
Newton, Baumberger 1	¶.15	741
Burgess, Singwald 1	..05	550
Wirt County—		
Patterson, Robinson Pet. Co. 21	*	540
INDIANA		
Posey County—		
Sun, Gray 1	264	2707
KENTUCKY		
Butler County—		
Cumberland Pet. Co. et al, Harper 1	30	174
Evans et al, Harper 8	20	172
Daviess County—		
Hamilton, Birk City School 2	300	1872
Major Oil Co., Nelson 1	250	1891
Hagan 1	*	1900
Aetna Oil Service Corp., Morrison 1	80	1884
Ellis & Ashby, Howard 14	12	674
Fireline 7	*	....
Speary et al, Hagan 1	*	....
Henderson County—		
Hoosier Drilling Co., Blackwell 7	*	1907
McLean County—		
South Penn Oil Co., Nall 6	50	1472
Ellis & Huff, Sands 1	10	1665
J. C. Miller, Shutt 2	*	....
Ohio County—		
W. Kentucky Pet. Corp., Elmore 40	15	723
Cumberland Pet. Co., F&M Bank 1	*	1400
PENNSYLVANIA		
Beaver County—		
Freshwater & Reed, Laughlin 1	1	....
Greene County—		
Equitable Gas Co., Kuhn 1	¶.14	3634
Jacobs 4013	¶.08	3308
Warren County—		
Evjen et al, Dusenberry 1	*	4980
Washington County—		
Keystone Drilling Co., Ross 1	¶.04	2700
PENNSYLVANIA—Bradford District		
L. L. Slingerland, Fee	½	....
C. M. Lippert et al, Lippert	1	....
N.V.V. Franchot, Mgr., Trustee	15	....
Victory Oil Co., Wright	2	....
N.V.V. Franchot, Mgr., Trustee, Rounds	2	....
Quinlan Oil Co., Fee	5	....
Bradford Transit Co., 9 wells	9	....
Forest Oil Corp., 3 wells	3	....
Niagara Oil Corp., 5 wells	5	....
Bradford: Water (Pressure) Wells		
F. J. Eisert, Loop Estate	...	....
Niagara Oil Corp.	...	....
Butler-Armstrong District		
Heck & Co., Titus Peffer	3	....
D. L. Baird, N. M. Hoover	2	....
Middle District		
Turner Bros., A. McMullern	½	....
C. W. Wentling et al, J. A. McElhattan	*	....
R. M. Calvert, James Calvert	1	....
Wasson & Fleming, Lot 471	¶	....
New York-Pennsylvania: Gas Field		
Hanley & Bird, M. E. Woodward	¶	....

*Failures; †Junked; ¶Million cu. ft. gas.

ILLINOIS
Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Clinton County—		
Carpenter & Goldberg, C. B. & Q. 3	165	1352
Hawley O&G Co., Mussel 1	125	1392
Shell, Geary-Criley 2	106	1350
W. C. McBride, Allison 3	85	1385
Morris & Soloman, Ohl 1	60	1401
C. A. Sheppard, Capple 1	50	1379
Harry Rogers, Wilderman 1	50	1397
Quinsberry Drlg. Co., Tatum 1	*	1392
Marion County—		
Texas Co., Williams 3	600	1694
J. R. Oldstrom, Harvey 1	100	1384
Joe Hassett, Hanseman 1	*	1645
Giffert Drlg. Co., Ryan 1	*	1370
Paul Rossi, Home Bldg. & Loan 1	*	1397
Parshall & Graham, Shook 1	*	1930
Washington County—		
Salvage O. & F. Co., Reinkenmeyer 1	*	1030
Wayne County—		
Texas Co., Koontz 1	1725	3329
Silverman 4	300	3283
Sloan & Allen, Walker 1	180	3238

*Failures; †Junked; ¶Million cu. ft. gas.

Permission given for leasing New York townsites

Albany, N. Y.—Permission to lease property in the towns of Willing and Independence, Allegany County, held by Empire Gas & Fuel Company, Limited, to its affiliate, the Empire Producing Corporation, for gas drilling was granted last week by the New York public service commission.

The proposal calls for payment to the Empire Gas & Fuel Company of a royalty of one and one-half cents per thousand cubic feet of gas produced, with the company holding prior right to use such gas as may be available and that it may require for its own use in the event of emergencies.

Look for coal and find oil off Nova Scotia coast

Michael Dwyer, Nova Scotia minister of mines, and Alan Cameron, deputy minister, last week confirmed reports that oil had been found in a coarse sandstone formation by drillers seeking new submarine coal seams near Iverness on Cape Breton. The showing was encountered when a drill penetrated 233 feet horizontally on the west diagonal level of No. 9 Colliery, about 2200 feet under sea level and nearly 2 miles from the mainland.

Samples of the oil were sent to Ottawa for testing. Cameron described the structure as favorable for oil. While oil shale exists in Nova Scotia, flowing oil had never been encountered. The nearest field is in Albert County, New Brunswick.

West Indies June exports total 13,905,723 barrels

Crude and petroleum products exported from Netherlands West Indies during June totaled 13,905,723 barrels. Of this amount 7,436,225 barrels was shipped from Curacao and 6,469,498 barrels from Aruba.

The shipments, according to the Department of Commerce, were divided as to products as shown in the following table (figures in barrels):

Product	From Curacao	From Aruba	Total Exported
Kerosene	76,769	230,860	307,629
Fuel oil	4,225,889	3,911,763	8,137,652
Gasoline	1,567,611	1,185,736	2,753,347
Gas oil	349,559	334,366	683,925
Diesel oil	321,330	650,841	972,171
Lube oil	83,585	14	83,599
Crude oil	811,482	155,918	967,400
Total	7,436,225	6,469,498	13,905,723

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P. O. BOX 2811 **HOUSTON, TEXAS**

Rocky Mountain Fields

North extension for Frannie field appears certain. Attempt to extend North Baxter Basin is failure.

Casper, Wyo.—Northern extensions of the Frannie field, Park County, northern Wyoming, appeared a certainty this week. Continental Oil Company's Northern Pacific 1, SE SE NW 23-58n-98w, cored good oil saturation from 3464 to 3530 feet, and had particularly heavy saturation from 3522 to bottom. The company is drilling plugs, with 7-inch production string at 3442 feet, and preparing to run tubing.

Between 600 and 800 acres will be opened up by the test for exploration. Stanolind Oil & Gas Company, the Kirk Oil & Gas Company, and Blue Ridge Oil Company, the latter a recent entrant to the field, are other acreage holders in Frannie.

Gets Water in Sundance

Selegna Oil Corporation's Union Pacific 1, SW SW 11-20n-104w, a northwest extension test to North Baxter Basin field, was a disappointment, yielding water in the lower Sundance sand on drill stem test from 5001-5076 feet. The well is drilling below 5200 feet to test the base of the sand. Located a little more than three miles from nearest gas production in the field, the Selegna well has cored several oil saturated sections in the Sundance only to find water coming in on a formation test. The well may possibly indicate oil production closer into the gas pool in the Sundance, and may be located on the oil-water line at North Baxter.

The second well of General Petroleum Corporation at Cole Creek field, 13 miles northeast of Casper, Natrona County, is drilling below 4000 feet, within a few days drilling time of its first objective, the Shannon sand. It is State 1, NW NE SE 16-35n-77w. The discovery well, Government 1, CNW NW SE 21-35n-77w, a mile to the south, cored Shannon saturation from 4509-4539 feet. Threatened with a caving hole that might possibly stick the drill stem on a formation test, company cemented 11¾-inch joint welded casing at 4624 feet, and passed up the Shannon to test lower objective, finally completing in the Lakota at 8020 feet. The discovery also cored good saturation in the Wall Creeks at 6686-6879 feet and 7051-7077 feet. The company may possibly test the Shannon in the second well depending largely on how the formation is standing up. Major objective, as in the initial test, is the Wall Creek.

Two wells started in the Lance Creek field this week, both important extension tests a half mile south of production on the west side of the field. The Continental Oil Company's B-1 Dielman, SW SE NE, is spudding. Offsetting the test immediately to the west, the Mackinnie Oil & Drilling Company is digging cellar for Thompson 4, SE SW NE 7-35n-65w.

Both wells are on about the same contour as the Minnelusa Oil Corporation's H. & M. 2, NW NE NE 8-35n-65w, on the southeast side of the field, a completion which recently extended proved limits a half mile south. The H. & M. well completed for the largest Leo sand producer in Lance Creek to-

MOUNTAIN STATES
Completions

MONTANA

Company, Well and Location	Init. Prod. Bbls.	Depth
Glacier County (Cut Bank)—		
Glacier Prod. Co., Mueller 2, csw sw 18-33n-5w	50	2958
Dr. Peter Potter, Tribal 3, sw se sw 12-32n-6w	39	3020
Toole County (Kevin-Sunburst)—		
Consolidated Gas Co., Lutz 3, csw nw 34-33n-2w	¶1½	1575
UTAH		
Summit County (Spring Hollow)—		
Mountain F. S. Co., Wilde 1, nec se 9-2n-5e	•	5538

*Failures; †Junked; ¶Million cu. ft. gas.

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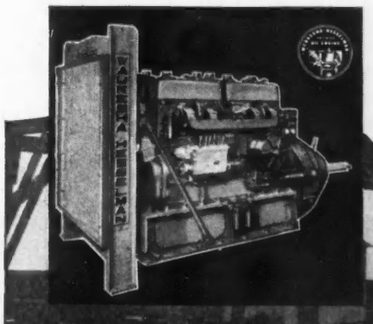

FOR THE GREATEST OVER-ALL ECONOMY

date, testing 112 barrels of oil initial from 5513-5543 feet, with 1300 pounds pressure on the tubing. Possibly four more offsets are called for by the H. & M. well.

Try to Convert to Oil Well

Sinclair-Wyoming Oil Company's Mahoney 3, CSE NW 34-26n-88w, Mahoney Dome field, Carbon County, Wyoming, which is a gas producer from the Frontier, Dakotas, and Sundance, cored oil saturation in the Tensleep sand, and is preparing to test. The 7-inch production string is set at 4291 feet, with hole bottomed in saturation at 4356 feet. The old Producers & Refiners Corporation drilled Government 1, just 80 feet west of the Sinclair location, in 1929 to the Tensleep, and made an inconclusive test of 80 barrels initial from 4600 to 4760 feet. A string of tools was dropped in the hole and the well could never be cleaned or adequately pumped.

Use Slim Hole Outfit

In the Lost Soldier field, Sweetwater County, Wyoming, Sinclair's Lost Soldier 79, SE NE NE 10-26n-90w, is drilling at 1511 feet. Well is headed for completion in the Sundance sand, and is using a slim hole rotary outfit, the first employed in the Rocky Mountain division.

After Shallow Oil

Following completion of a 15-barrel 40-gravity well at 490 feet, Lincoln Oil & Gas Company has started a second well in Plunkett field, Fremont County; Tribal 26, NE SE SW 23-1s-1e, is drilling at 93 feet.

George Keisling's Fee 1, NW NE NE 35-46n-64w, south extension test to Osage field, Weston County, is swabbing 4 barrels per hour, and is waiting on erection of a 1500-barrel storage tank before making a pumping test. Production is from 1928-1956 feet in the Newcastle sand. Updike Brothers' Government 1, NE SW NE 35-46n-64w, a 40-acre location to the south, is checking 100 feet lower structurally. Well is waiting on cement to set around the 8¼-inch casing at 1200 feet.

Plug North Dakota Well

The California Company this week plugged and abandoned Kamps 1, CNW NE 3-154n-96w, Nesson structure, Williams County, North Dakota, because of mechanical difficulties. The well drilled to 10,281 feet for a Rocky Mountain depth record. The previous record was held by Amerada Petroleum Corporation's dry hole near Cheyenne, Wyoming, on Borie-High, which went to 9381 feet. The California Company plans next spring to drill another test near Kamps 1 and one several miles to the south across the Missouri River in McKenzie County.

Mountain Fuel Supply Company had a failure in the important wildcat test drilling on the Spring Hollow structure, Summit County, northeastern Utah. The well, J. H. Wilde 1, NEc NE SE 9-2n-5e, was a dry hole at 5538 feet after failing to pass through the Frontier formation. It is believed to have passed through the major fault transversing Spring Hollow accounting for the abnormally thick Frontier formation. Wilde 1 was drilled to explore for an auxiliary supply of gas for Mountain Fuel's Salt Lake City system. Gas for the Utah capital is produced from the Hiawatha, North and South Baxter Basin fields near Rock Springs, southwestern Wyoming.

NEW MEXICO Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Eddy County—		
Holcomb et al's State 1, sw ne nw 22-17-28	•	1980
Lea County (Eunice)—		
Gulf, Day 4, se sw nw 6-22s-36e	327	3850
Lea County (Hardy)—		
Continental et al, Meyer 1-B-31, c nw sw 31-20s-38e	864	3790
Repollo, Turner 2, sw ne sw 29-21s-37e	190	3803
Lea County (Langlie)—		
Stanolind, Langlie 4-B, c nw sw 14-25s-37e	150	3418
Lea County (Maljamar)—		
Maljamar Oil Co., Wm. Mitchell 5, cnw nw 19-17-32	20	4033
Lea County (Mattix)—		
Weier Drlg. Co., L. Woolworth 1, ne ne sw 28-24s-37e	700	3565
Lea County (Vacuum)—		
Phillips, State-Santa Fe 9, c se se 21-17s-35e	300	4645
Shell, State 1-B, c se se 30-17s-35e	385	4700

•Failures; †Junked; ¶Million cu. ft. gas.

New Mexico Fields

Start offset to surprise well in Vacuum area

Hobbs, N. M.—Following closely on the surprise given the Vacuum area of Lea County last week when Helmerich & Payne and Continental Oil Company's State 1-G-36, C NW SW 36-17s-35e, proved the existence of a new, high-gravity pool 2 miles southeast of production in Vacuum field, Shell Petroleum Corporation dug cellar and pits for a test midway between the new well and the field. The try will be State 1-U, C NE NW 3-18s-35e.

Tide Water Associated Oil Company's State 1-L, a wildcat in northeast Lea County, 3 miles east of Tantum, is shut down after failing to find shows to 5294 feet. A possible pay between 5254 and 5294 feet was given a 30-minute test but only developed mud and sulphur water. Upper zones may be tested.

Lea County has a second wildcat test location, The Texas Company's S. W. Lodewick 1, C SW SE 34-18s-33e, 10 miles southwest of the Vacuum pool. Nearest production is at the same firm's Corbin 1, completed as a small pumper.

Continental Oil Company's State 1-I-7, ¼ mile southwest of Repollo Oil Company's State 1-197, outpost well 4 miles northwest of the Vacuum area, showed for a little free oil between 4649 and 4651 feet and continued drilling past 4860 feet. The show encountered in State 1-I-7 was found in the zone producing in Repollo Oil Company's well.

F. C. Wilson et al's State 1, a wildcat 6 miles west of Eunice field, topped anhydrite at 1695 feet, which is 51 feet higher than it was topped in two completions a mile north, and a mile northeast of the Wilson well. Location is C SW NE 7-21s-36e, Lea County.

Michigan Fields

Two widely separated areas due for immediate rush work.

Mt. Pleasant, Mich.—Heavy drilling campaigns appeared assured for the next 30 to 90 days in two widely separated new Michigan districts as a result of successful well completions during the week.

Major interest centers on the Freeman-Redding district, Clare County, where two completions developed after-acid potentials ranging from 1500 to 2500 barrels daily. S. J. Higelmire Trustee's Van Horn 2, SE SW NW, Section 3-18n-6w, 660 feet south of same company's discovery well, developed 120 barrels natural production from Monroe lime at 3891½ feet and shot up to 2256 barrels on a 24-hour test, producing through 2-inch tubing and with 275 pounds on casing and 100 pounds on tubing. Flowing open the well produced 101 barrels on a 23-minute gauge.

Most interesting fact, outside of the high flush, was that No. 2 was bottomed 14½ feet in the Monroe and although 3 saturated zones were drilled above the present pay, the well filled up only 760 feet over a 36-hour period. Subtracting for elevation differences, No. 2 is 14 feet deeper than the discovery, which was complete 4½ feet in the Monroe.

Pure Oil Company's Switzer 1, Section 27-19n-6w, Redding Township, 1½ miles north of the discovery, picked up Monroe black water 9 feet in the Monroe after testing natural for about a 10-barrel well 7 feet in. There appears a possibility that at least 2 if not 4 zones in the Monroe will produce if carrying adequate porosity. The fact that No. 2 drilled 14½ feet into the lime without picking up water and developing satisfactory flush flow was accepted as an encouraging note. However, some operators felt that this may indicate a comparatively small closure and with the productive area being much more limited than at first predicted.

The discovery well initialed 286 barrels natural when completed in July this year and 31 days later was stepped up to 1015 barrels with a 250-gallon acid treatment. The well produced 18,473 barrels in August. Operators reacidized September 10 and increased production to 1238 barrels in 14 hours with a 500-gallon shot.

Gulf Refining Company's Van Horn 1, east offset to the discovery, Section 3-18n-6w, showed only 90 barrels natural, but developed 832 barrels in 9 hours and 1478 barrels in 24 hours after a 300-gallon treatment.

Completed last week for 2129 barrels the first 24 hours after acid, Socony Vacuum Oil Company's Van Horn 1, north offset to the discovery, increased to 3854 barrels when flowed open through casing and tubing for 14 hours and for 10 hours pinched in. Pipe line runs from the four producing wells on September 12 totaled 6210 barrels.

Meanwhile, Pure Oil Company has been unable to get Switzer 1, extension in Section 27, on regular production after two acid treatments, one of 250

gallons and the other of 1000 gallons. September 13 the company had re-acidized with the first 1200 gallons of a planned 5000-gallon treatment.

Two flank tests were due to test the Monroe zone before the close of the week. Wicklund Development Company's State M3, Section 5-18n-6w, 1½ miles due west of the discovery, set 5-inch casing at 3889 feet reportedly 12 feet off structure. McClanahan Oil Company's Perkins 1, Section 15-18n-6w, 1½ miles south of the discovery, was drilling out the Traverse section at 3510 feet.

Michigan-Toledo Pipe Line Company expected to wind up right of way buying and surveys for a projected 37-mile 8-inch line between the Mt. Pleasant station and Freeman this week. Construction is scheduled to start not later than September 26. Oil now is being moved via a short 4-inch line to railroad racks at Lake George.

Van Buren County

First two completed offsets to Fisher & McCall's Wiggins 1, Section 9-1s-14w, Van Buren County discovery well, equaled the discovery in flush recovery. Same company's north offset developed an estimated 2450 barrel potential from 1251 feet, 3 feet in Traverse lime pay. Rex Oil Company's east offset flowed 152 barrels first hour at 1242 feet from the same zone and was estimated as a 2900-barrel potential well. Both wells are flowing natural.

Eighteen tests are active in this play, shallowest production ever developed in the state, with double that number probable if outlying wells now drilling produce. The village of Bloomingdale, a half mile south of the discovery, is due for a town-lot drilling campaign, with leasing still heavy and two machines slated to move in this week.

The discovery well, producing against back pressure, flowed 13,100 barrels the first 11 days on production.

Developments in the Upper Overisel pool, Allegan County, cooled off when two tests just west of the discovery well drilled dry. However, three other offsets were completed with acid treatment, ranging from 120 to 300 barrels per day. The discovery, drilled four weeks ago by Stewart & White et al, currently is flowing 400 barrels daily through tubing.

Other districts were comparatively quiet during the week.

MICHIGAN

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
Allegan County—		
Bridger Basin, Bachman 2, sw nw ne 30-4n-12w	*	1575
Gordon Oil Co., Scholten 5, nw ne ne 1-3n-14w	800	1472
Fortney Oil Co., Wesseling 3, se ne ne 1-3n-14w	900	1461
Adams Trustee, Schra 1, se ne ne 2-3n-14w	lcn.	abd.
Lentz & Miller, Boerman 2, sw sw nw 6-3n-13w	75	1490
Stewart Oil Co., Oldbekking 2, c w e se 21-4n-14w	300	1487
Oldbekking 3, sw se se 21-4n-14w	129	1488
Wagner, Tr., Slotman 3, ne ne sw se 21-4n-14w	*	1497
Mich. Devonian, Lampen 1, ne nw ne 28-4n-14w	*	1535
Muskegon Dev. Co., Berens 2, sw nw sw 36-4n-14w	925	1467
F. H. Gilde, Lampen 1, nw ne nw 32-4n-13w	*	1650
Arenac County—		
Sterling Drlg. Co., Shearer 2, nw se ne 26-19n-3e	75	2951
R. L. Hill, Reinhart 1, se ne se 25-19n-5e	*	1550
Clare County—		
Higelmire Tr., Van Horn 2, se sw nw 3-18n-6w	2256	3891
Gulf, Van Horn 1, nw se nw 3-18n-6w	1500	3881
Gladwin County—		
Fortney Oil Co., Smart 2, se nw ne 29-17n-2e	40	3555
Kale-Grave, Chovic 3, sw ne se 23-18n-1w	10	3599
Rex Oil Co., Ruck B-3, ne nw sw 26-18n-1w	100	3590
Bell-Mark, Schember 3, nw sw nw 26-18n-1w	180	3610
Brehm Oil Co., Kitchen 1, ne se ne 20-19n-1w	*	1405
Isabella County—		
C. W. Teater, Bellinger 1, sw se se 32-14n-5w	*	3740
Midland County—		
Sun, State B10, ne ne se 27-16n-1w	152	3793
State B13, ne sw se 27-16n-1w	180	3801
Missaukee County—		
C. W. Teater, Gray 1, ne sw sw 32-23n-5w	*	4200
Van Buren County—		
Fisher & McCall, Wiggins 2, ne sw se 9-1s-14w	2450	1251
Rex Oil Co., Williams 1, sw se se 9-1n-14w	2900	1242

*Failures; †Junked; ¶Million cu. ft. gas.

California Fields

Two completions put Coalinga Nose back in spotlight.

Test may break world's deepest producer record.

Los Angeles.—At one time described as a "flash in the pan," Coalinga Nose in Fresno County again took the spotlight in California oil circles last week when two excellent completions were recorded, the second by the Petroleum Securities - Seaboard Oil - Honolulu Oil combination which discovered the deep productive zone, and the first well for the Superior Oil Company.

Petroleum Securities and associates' Grimes 88, SE Section 12-20-15, established an initial yield of approximately 2500 barrels of 33.3 gravity oil along with 1,500,000 cubic feet of gas per day from 6968 feet, with 9⅝-inch casing cemented at 6740 feet, and 348 feet of 6⅝-inch liner and 199 feet of 100-mesh perforated landed to 6650 feet. After establishing its potential, this project will be choked in.

Northeast Extension

Superior Oil Company's Hight 1, east outpost in Section 8-20-16, swabbed in for 3000 barrels of 33 degree gravity oil per day from the interval between 7965 feet and 7975 feet with 8⅝-inch landed at 7965 feet. Reports are current that Hight 1 may later be killed to permit additional coring. This well extends the field to the northeast. The company has staked site for another well in Section 7-20-16, northwest of Hight 1.

Universal Consolidated's Leavitt-Hintze 1 is down to about 8000 feet and is understood to be in the Cretaceous shale, while Petroleum Securities' No. 7-F7, Section 7-20-16, bottomed at 6749 feet, is slated for a production test.

Swabbing at 14,018 Feet

Superior Oil Company may crack the world's deepest producing well record in a few days as Helbing 1 in the Rio Bravo Field, Kern County, is reportedly swabbing for production with bottom of the hole at 14,018 feet. Situated in Section 1-29-25, Helbling 1 is the most easterly outpost test in the field. Gun perforators shot casing in this well to 14,000 feet, and it is pretty certain that the Eocene has been penetrated.

Disappointment has marked the drilling of Dawn 2, a south outpost well in the Lomita extension to Torrance field. This project has been suspended at 5411 feet, having cored only a few scattered showings. D & B Oil Company is undecided what to do, but may take it down to the Schist. General Petroleum's Poggi 9 is cutting 60 percent, and a water witch is being run to locate the source.

It is believed that Dicks 1, drilled in the Huasna Valley, 12 miles north of Santa Maria, by Hancock Oil Company, will be developed into a satisfactory pumper from a shallow depth. Drilled to approximately 5000 feet, where it failed to come in, Dicks 1 has been plugged back to 3200 feet where it originally yielded from 300 to 400 barrels of oil per day.

Caminol Company, Ltd., has entered the Dominguez field south of Los Angeles with the acquisition of 20 acres from George C. Mindrup. This acreage is situated at the southeast corner of Alamita Boulevard and Del Amo street. Shell Oil Company's Reyes 95, an edge well southeast of Victoria and Central streets, which bottomed at 9180 feet, swabbed in, making water and a slight showing of oil. A little more work will be necessary to make it into a producer. W. W. Stabler's No. 2 is swabbing at 4506 feet.

CALIFORNIA

Completions

Company, Well and Location	Init. Prod. Bbls.	Depth
West Coyote—		
Severns Drilling, McNally 1-A	125	5615
Montebello—		
Union, Wilcox 2	617	6254
Torrance—		
Consolidated Pet. Co., No. 3	360	4807
Elexico Oil Co., Airey 3	395	4980
Gunnar Eriksson, No. 1	135	4980
Freeman Holding Co., Baxter 1	280	4963
Jones-Long, Von Trik-Lyon 2	400	4971
Felix Mallon, Martner 1	150	5130
Pennsylvania Oil Co., Lomita 1	180	4961
Silver Strand Oil Co., No. 2	495	4965
Wilmington—		
Allied Pet. Co. (LB) No. 22	850	4345
General, PE Comm. (LB) 1	1200	4100
Belridge—		
Texas Co., Martin 4	205	5313
Kern Front—		
Kern Oil Co., No. 3-C	90	1988
Midway-Sunset—		
Big Ten Oil Co., No. 12	35	1274
Round Mountain—		
Brown & Saffold, Newberry 1	*	2300

*Failures; †Junked; ¶Million cu. ft. gas.

IMPORTANT WILDCAT TESTS

ALABAMA

Barbour—H. A. Stebbinger's Mrs. Alyce Robertson 1, 19-10-26, rur. **Greene**—R. T. Jeffrey et al's Lett 2, 3-20n-2e, sd 700 ft. **Lawrence**—Mid-Southern Pet. Co.'s Jacobs 1, sw se 11-7-7, ruct. **Mobile**—J. C. Prine's King 3, ne ne 4-1n-4w, sd 1120 ft.

ARKANSAS

Calhoun—Samuel S. Alexander's Smythe 1, c ne ne 7-11-14, dr 1500 ft. C. E. Murdock's Southern Kraft 1, nw nw 17-14-13, dr 2490 ft. **Columbia**—Atlantic's Baker 1, c se nw 13-17-20, dry abn, td 7779 ft. Harrington 1, sw nw 14-17-20, dry abn, td 7789 ft. Petroleum Finance Co.'s Baker 1, c sw nw 13-17-20, dry abn, td 7775 ft. Baker 2, lcn abn. Standard of La.'s Tina Crumpler 1, 15-17-19, woc after trying new squeeze job, old td 7500 ft; E. D. Harris 1, 15-17-19, rur. Warren 2, 18-16-22, dr shale and sand 6705 ft. G. H. Vaughn's Garrett 1, c ne se 14-17-20, completed making 24 bbls hr, td 7553 ft. Tidewater & Seaboard's J. T. Beene 1, 15-18-19, woc surf csg. **Craighead**—Tenn-Ark. Inc.'s Martin 1, 35-14n-3e, ruct td 1754 ft. **Crittenden**—Stanley Oil Corp.'s D'Anner Hrs. 1, arr test, td 3351 ft. **Little River**—Barbere et al's Mills 1, se sw nw 18-12-29, rur. Clark et al's Strawn 1, sw se 20-10-32, woc 10-in csg 62 ft. **Lonoke**—J. F. Russell's Gunter 1, se se 17-5-10, dr 1650 ft. **Nevada**—Paul D. Bowlen's Stocks 1, c nw se 9-15-22, logged saturation in Nacatoch for 33 ft to 1211 ft, pb to 1308 ft, pumping est 50 bbls asphaltic oil daily, old td 3615 ft. **Pulaski**—Coker Oil Corp.'s Stone 1, 36-3n-11w, sd 905 ft. A. L. Kitselman's Fee 2, se sw 2-1s-13w, sd 3389 ft.

CALIFORNIA

Los Angeles: Royal Land's No. 1, 8-4-17, co 1083 ft. D. H. B.'s Buena Park 1, 34-3-11, dr 3693 ft. John McKeon's Carmenita 1, 21-3-11, r 8350 ft. British American's Pico 1, 12-2-12, wo 4568 ft. Tide Water Associated's Porter 1, 27-3-16, dd 3969 ft. R. T. Grady's Sepulveda 1, 23-5-14, lcn. Security Land's No. 1, 8-2-11, dr 2247 ft. **Orange**: New Fields Oil's No. 1, 16-5-11, lcn. A. V. Oil's No. 1, 16-6-10, wocs 4634 ft. **San Diego:** Dauphin Dev. Co.'s Kelly 1, 16-12-4, dr 500 ft.

NORTHERN CALIFORNIA

Fresno: Holly Dev. Co.'s No. 1, 12-20-15, lcn. Petroleum Securities' Grimes 88-12C, 12-20-15, completed; No. 7-7-F, 7-20-16, dd 6747 ft; Gatchell 1-18 F, 18-20-16, shut in—running pressure bomb, td 6908 ft; No. 31-18F, rig. Magnet's Fearon 2, 18-20-15, dr 4500 ft. Medford's F. C. Goetz 1, 10-20-15, dr 5945 ft. Standard's No. 82-13-C, 13-20-15, dr 5970 ft. Stuart Oil Co.'s Stuart 1, 12-21-14, lcn. Superior's Hight 1, 8-20-16, wocs 7999 ft. Texas Co.'s Mohawk 19, 12-20-15, bailed water, oih 4424 ft. Tide Water Associated's Fleishacker 57-1, 1-19-15, dr 3538 ft; Guardian 66, 12-20-15, dr 5910 ft. Universal Consolidated's Leavitt-Hintze 1, 12-20-15, dr 7900 ft. Pure's S. P. O. Co. 1, 31-18-17, dr 12,221 ft. Jacalitos Pet. Co.'s No. 1, 14-21-15, dr 7192 ft. Dauphin Dev. Co.'s Ragan 1, 19-21-14, dr 2125 ft. Cyrus Pierce's Shorb 1, 16-14-12, sd 500 ft. **Kern:** Ohio's KCL A-8, 32-31-26, flowed little salt water during formation test, sd 11,186 ft; KCL F-1, 10-31-25, dr 5380 ft. California Lands' Salisbury 1, 7-29-24, dr 2302 ft. Shell's KCL B-87-4, 4-30-25, rig. Gibson's Alferitz 3, 14-25-18, dr 1089 ft. G. W. Johnson's Brown-Paulette 1, 33-29-30, co 1170 ft. Richfield's Tupman-Western 1, 32-30-25, dr 7798 ft. Texas Co.'s Camp-West-Lowe 1, 7-29-27, dr 10,114 ft. Continental's KCL B-2, 12-29-26, sd 9183 ft. Petrol's Reserve-Petrol 33-5, 33-11-19, rur to dd 4607 ft. Hall-Baker's Reserve 33-2, 33-11-19, co 4615 ft. Richfield's KCL 1, 28-11-20, dr 6532 ft. Wilshire's Tejon 34-1, 34-11-19, rig. C. C. White's Armstrong 2, 9-26-26, rig. Desert Glow's No. 3, 14-27-27, rig. Framac's Brown 3, 22-27-27, wocs 1355 ft. Freid Julius' No. 1, 34-32-24, rur. General's St. Helens 2, 12-28-20, lcn. Little & Gilstrap's Keating 1, 20-27-27, rur. Dilamar's Quinn 1, 15-25-27, pumping 15 bbls daily 2956 ft. Richfield's Union Avenue 1, 6-30-28, dr 5243 ft. Continental's KCL A-3-8, 8-27-24, dr 13,040 ft; Seaboard-Associated-KCL C-1, 27-27-24, sdtr 11,921 ft, td 12,778 ft. Standard's Mushrush 1, 7-27-24, dr 11,600 ft; KCL 8-B-1, 17-27-24, dr 12,400 ft. **Tulare:** Caminol's A. O. G. 3, 29-24-24, dr 8863 ft.

COASTAL COUNTIES

Santa Barbara: Standard's Los Flores 1, 27-9-33, producer shut in 6556 ft. Barnsdall's Pezzoni 1, 15-8-32, dr shale, oih 2165 ft. Petrol's Magenheimer 5-11, 9-8-32, wocs 4714 ft. Continental's La Laguna 2, 25-8-31, rur. **San Luis Obispo:** G. E. Renner's R. H. L. 1, 7-32-22, lcn. Loma Grande's Luis 1, 28-31-13, dr 2000 ft. Hancock's Scherer-Dickes 1, 30-12-33, wocs 5593 ft. **Ventura:** Charles R. McKinnis' Cosley 1, 14-4-19, r 828 ft. Merchants' Cochrane 8, 1-4-20, dr 990 ft. St. Louis' Williamson 1, 1-4-20, co 420 ft. Texas Co.'s Shiells 135, 4-3-19, dr 2604 ft. Albatross' Scheiferle 1, 17-3-20, rig. Clipper's Calco 1, 17-30-20, rig. Texas Co.'s Yale Richardson 5, 13-3-21, dr 6659 ft. Section 20's No. 1, 20-5-19, wocs 2145 ft. Hardison & Temple's No. 1, 22-4-21, wocs 656 ft. J. W. Martin's Arnett 1, 15-4-21, fsg 1230 ft. Stallings, Senter & Ahlburg's Stallings 1, 24-4-21, sd 1445 ft. Ventura Drilling's No. 1, 10-3-23, fsg 330 ft.

EXTREME NORTH

Colusa: Amerada's C. L. C. 1, 34-16-1, dr 6912 ft. **Glenn:** Ohio's Willard 2, 18-20-2, dr 763 ft. **Madera:** Barnhart-Morrow's Arnold 1, 22-10-17, rur. **Monterey:** Texas Co.'s Lewis 1, 1-19-5, dr 2992 ft. **San Mateo:** Wilshire's Cowell 2, 20-6-5, rur. **Solano:** Richfield's Potrero Hills 1, 10-4-1, dr 4270 ft. **Stanislaus:** Crestimba Oil's Simon Newman 1, 12-7-7, dr 275 ft.

FLORIDA

Levy—Fla. Oil Disc. Co.'s Sholtz 2, sw sw ne 9-15s-13e, sd 3986 ft. **Nassau**—St. Mary's River Oil Corp.'s Hilliard Turpentine Co. 1, nw nw se 19-4n-24e, sd 4510 ft. **Polk**—Edw. A. Hill's Polk Co. Lbr. Co. 1, nw ne 32-25s-25e, dk. **Suwannee**—J. W. Phillips Oil Exploration's Shilkrett 1, nw nw 14-4s-14e, spd and sd. Wm. G. Blanchard's Lucy Cotton 1, se ne 35-3s-11e, sd 200 ft.

ILLINOIS

Bond—Cole et al's Williams 1, nwc se 6-4n-4w, rur. Huppard et al's Dresser 1, sw ne nw 21-6n-4w, sd 1525 ft. Elnor et al's Dilman 1, sw se sw 13-6n-2w, sd 420 ft. **Champaign**—Sidney O&G Co.'s Welding 1, sw se ne se 10-17n-10e, rur. Barber & Seiver's Lindsey 1, c nw se 20-20n-8e, dr 400 ft. **Christian**—Swords & McDougall's Warren 1, nw se se 23-11n-1e, rur. **Clinton**—Watkins & Wright's Wise 1, ne nw nw se 24-1n-3w, hfw, dr 770 ft. Farreley et al's Berginan 1, nw sw nw 30-1n-3w, dr 500 ft. Sappington et al's Hilgemann, se ne nw 22-3n-3w, ur 1030 ft, hfw. M & K Oil Co.'s Kesner 1, ne nw ne 10-3n-2w, ur 1139 ft, hfw. **Cumberland**—Fisher et al's Cable 1, nec 27-9n-9e, mirt. **Edwards**—Leach Bros.' Lee 1, sw ne se 11-1s-10e, dr 3430 ft. **Edgar**—Lapsley's Roll 1, swc ne 17-14n-13w, dr 500 ft. **Effingham**—Carter's Tennery 1, sw se sw 31-9n-4e, testing 1652 ft. **Fayette**—Whisenant et al's Rexwinkle 1, nl se ne 20-6n-3e, dr 550 ft. Rosenthal's Washburn 1, ne se nw 30-6n-3e, td 1622 ft. Phillips' Perryman 1, nec nw 3-8n-1e, sd 1521 ft. Rockwood, Cooper 1, swc ne 9-8n-1e, rog. Weasley, Miller et al's Thull 1, c se sw se 14-8n-1e, td 835 ft, r. Whisenant et al's Zanders 1, c sw se nw 36-9n-3e, co, td 1672 ft. **Franklin**—Buell's Forrest 1, sw se ne 4-5s-1e, dr 2915 ft. Adams O&G Co.'s Ben Coal Co. 1, swc ne 19-5s-2e, sd 2845 ft. **Gallatin**—Bailey & Lucus' Logan 1, se ne ne 21-8s-8e, sd 1316 ft. **Jackson**—Eason Oil Co.'s Bowlin 1, sec ne 12-7s-2w, dr 1325 ft. **Jasper**—Kingwood-Burkan's Harrison 1, c w½ sw sw 2-7n-10e, rog. **Jefferson**—Jennings et al's Patton 1, nw ne sw 1-1s-1e, fsg 1170 ft. Buell, Sattagast 1, nec nw 5-3s-4e, rog. Benedum-Trees' Jeff 1, c nw ne16-4s-2w, cornig 2453 ft. Price & Parker's Hamilton 2-A, swc nw 20-4s-3e, dr 2898 ft. **Lawrence**—Rockstead's Ulrich 1, se sw ne 20-3n-13w, rur. Hubst et al's Houghton 1, c se se 12-4n-11w, dr 1150 ft. Kesl et al's Warner 1, nec 23-4n-11w, sd 1711 ft. Strine Hanke et al's Carrie 1, c se ne 21-2n-13w, rur. **Macoupin**—Spence Bros.' Fee 1, se sw sw 13-8n-9w, sd 1700 ft. Dillon et al's Keele 1, sec ne 32-10n-9w, rur. **Madison**—Penn-Ill's Poog 1, nw ne sw 12-4n-9w, dr 1500 ft. Spivey Drlg. Co.'s Storms 1, se sw ne 15-6n-8w, sd 1799 ft. **Marion**—Gray & Blalock's Welch 1, e½ ne nw 2-1n-1e, rog. Bell, Schlageter 1, ne se sw 5-1n-1e, sd 1550 ft. Hansky, Yoos 1, nw ne ne 6-1n-1e, dr 275 ft. Thompson Drlg. Co.'s Wright 1, c ne se ne 8-1n-1e, td 1282 ft, rur. Gardenshire, Wesner 1, sw ne se 12-1n-1e, dr 1950 ft. Superior's Luttrell 1, sw se se 4-1n-2e, mirt. Frontier O&G Co.'s Fyke School 1,

ABBREVIATIONS

The following abbreviations, signs, etc., are used in completions and wildcat reports in THE OIL WEEKLY.

*—*dry hole abandoned well.*
‡—*salt water (completions).*
†—*junked and abandoned.*
¶—*million feet of gas.*
abd—*abandoned.*
bbls—*barrels.*
br—*building rig.*
bs—*basic sediment.*
csg—*casing.*
co—*cleaning out.*
dd—*drilling deeper.*
dk—*derrick.*
dr—*drilling.*
fsg—*fishing.*
ft—*feet.*
hfw—*hole full of water.*
in—*inches.*
lcn—*location.*
m—*milling.*
mim—*moving in materials.*
mit—*moving in tools.*
mot—*milling on tools.*
n, s, e, w—*north, south, east, west.*
oih—*oil in hole.*
owdd—*old well drilling deeper.*
owpb—*old well plugging back.*
pb—*plugged back or plugging back.*
r—*reaming.*
rog—*rig on the ground.*
rur—*rigging up rotary tools.*
rust—*rigging up standard tools.*
sd—*shut down.*
sdtr—*sidetracking.*
sg—*show gas.*
si—*shut in.*
so—*show oil.*
so&g—*show oil and gas.*
spd—*spudding.*
sr—*straight reaming.*
sw—*salt water.*
td—*total depth.*
ur—*underreaming.*
wih—*water in the hole.*
wo—*workover.*
wocs—*waiting on cement to set.*
wosr—*waiting on standard rig.*

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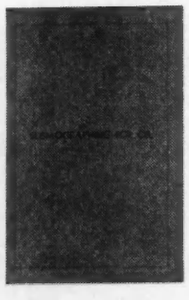

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nw ne sw 17-1n-2e, rur. **Dalton's Clifton 1**, ne sw sw 15-1n-4e, so 2682 ft, sd. **Boyce et al's Foster 1**, c nw nw se 10-2n-1e, sd 1340 ft. Oil Roy's, Suggs Meeker 1, c w½ nw nw 11-2n-1e, sd 1109 ft. Wanner et al's Yourng School 1, ne nw se 20-2n-2e, woc 1731 ft. Wanner et al's Yourng Church 1, swc 21-2n-2e, lcn. Haynes & Thomas Drlg. Corp.'s Lee 1, se sw sw 28-2n-2e, woc, rust, td 1726 ft. Sheppard et al's Green 1, sw ne sw 30-2n-2e, td 1924 ft, to dd. Conrey-Balwin et al's West Nation School 1, sw swc 33-2n-2e, td 1759 ft, rust. Boyce & Welch's Fredrick 1, sec 36-2n-2e, dr 1450 ft. Pyramid Pet. Co.'s Roddy 1, sec sw 20-2n-3e, sd 2207 ft. Coyer's Mulvaney 1, se ne se 6-2n-4e, sd 1050 ft. **Massac**—Kahle et al's Harvick 1, swc 23-14s-3e, sd 3000 ft. **Menard**—Scroggins' Fee 1, c sw sw 24-19n-5w, to pull 5-in, td 1570 ft, pb 1555 ft. **Montgomery**—Hammer's Jones 1, c nw¼ 22-7n-3w, dr 675 ft. Myers et al's Klekamp 1, sw se 29-8n-5w, sd 910 ft. **Morgan**—Waverly Oil Co.'s Hubbs 1, c e½ e½ e½ 33-14n-8w, dr 1650 ft. Alexander Oil Co.'s Gray 1, e½ nw ne 35-15n-9w, lcn. **Piatt**—Pray's Baker 1, sw ne ne 17-18n-6e, td 2005 ft, run 6-inch. **Pope**—Whitlock et al's Anthis 1, nwc ne 12-11s-5e, sd 1760 ft. **Richland**—Pure's Wakefield 1, w½ nw ne 26-4n-9e, sd 2582 ft, so. **Saline**—Carpenter et al's Sloan 1, sec sw 32-7s-6e, dr 950 ft. Flagherty & Wayneberg, Choisser 1, ne nw nw 5-18s-7e, dr 850 ft. **Shelby**—Strickler et al's Sonner 1, se sw sw 20-10n-1e, rur. Jolly's Jenkins 1, se se se se 26-10n-4e, sd 1000 ft. Lewis et al's Hopkins 1, c se se se 32-10n-4e, spd and sd. Connell's Laeding 1, sec ne 30-11n-5e, dr 590 ft. Kingwood's Staley 1, se ne ne 17-12n-4e, dr 450 ft. **St. Clair**—Neil's Pfeffer 1, ne se ne 20-2n-6w, td 791 ft, ur. **Washington**—Harris et al's Hage 1, c s½ se se 18-1s-5w, dr 150 ft. Morris' Marquard 1, se nw sw 33-1s-5w, sd 900 ft. Morris et al's Begulin 1, swc nw 12-1s-1w, rog. Hull, Stoffer & Boughter's Williams 1, se sw se 7-2s-3w, mirt. Bitterman's Bonk 1, c se ne sw 16-3s-2w, dr 500 ft. Thompson Drlg. Co.'s Musial 1, se sw nw 19-3s-1w, sd 1364 ft. Adventure Oil Co.'s Kcychi, sec nw 30-3s-1w, pits. **Wayne**—Moore's Moore 1, se ne nw 16-3s-5e, td 1000 ft, hfw. Fred Bruce's Holland 1, c s½ nw nw 5-3s-7e, mirt. Iroquois O&G Co.'s Phillips Walker 1, c nwc 16-3s-9e, pumping salt water with so. Duncan Oil Co.'s Ullom 1, c w½ sw nw 22-2n-8e, dr 2760 ft. **White**—Arab Pet. Corp.'s Frank Doerner 1, sec 12-7s-8e, sd 3063 ft, woc. **Williamson**—Gelo. Oil Synd.'s Scott 1, sw se sw 4-10s-2e, fsg, td 1470 ft.

KANSAS

Barton—Carlock & Atlantic's Demel 1, ne nw 30-17-13w, dr 1275 ft. Long & Johnson's Eveleigh 1, sw ne 3-18n-14w, dr 550 ft. **Butler** Fred Phillips' Hanshaw 1, nec se 32-27-3e, dr 1200 ft. Solomon & Alexander's Sawyer 1, sw nw sw 2-28-7e, fsg 175 ft. Pryor & Lockhart et al's Lietzke 1, nw sw nw 24-28-7e, dr 2550 ft. Bowland & McCoy's Frankson 1, se sw 2-29-6e, sd 100 ft. **Cowley**—Gralapp et al's Clark 1, nw ne 11-31-3e, dr 1950 ft. Barnsdall's Elliott 1, ne 5-31-5e, dr 1500 ft. McKnab's O'Neal 1, nwc se 27-32-3e, dr 2985 ft. Gralapp & Continental's Community 1, nw 23-32-5e, rog. Tide Water's Stocki 1, nw ne 28-32-5e, rur. Milton et al's Hunt 1, sw ne 16-34-5e, sd 20 ft. **Geary**—Fowler & Tague et al's Aye 1, nw sw nw 10-12-8e, sd 145 ft. **Graham**—Duwe & Farris & Atlantic's Parker 1, c se sw 29-6-23w, dr 2375 ft. **Greenwood**—Dunlap's Warren Mortgage 1, nw sw 4-28-10e, sd 1575 ft. **Harvey**—Lanahan Drilling Co.'s Lagree 1, se se 4-23-3w, wocs 280 ft. **Marion**—Harwood Oil Co.'s Kaufman 1, nwc se 27-17-4e, fsg 2090 ft. Johnson et al's Miltz 1, swc 24-17-4e, sd 2025 ft. **Meade**—Pacific Midwest Oil Co.'s Rexford 1, ne se sw 8-30-29w, sd 1350 ft. **McPherson**—Western Kansas et al's Union 1, nw ne sw 18-17-1w, mim. Marylyn Oil Co.'s Dixon 1, nw ne nw 7-19-2w, ur 2350 ft. **Norton**—Power & Olson's Noel 1, c el ne 12-4-21w, dr 2335 ft. **Ottawa**—Babcock's Copeman 1, c nw s½ s½ se 7-10-2w, dr 2350 ft. **Pratt**—Champlin's Elliott 1, sw ne 26-27-14w, dr 3965 ft. **Rice**—Watchorn O. & G. Co.'s Caldwell 1, ne se ne 29-20-9w, dr 3195 ft. Glimac et al's Malone 1, se sw nw 36-20-10w, br. **Rooks**—Shindhelm & Haynes' Dorr 1, se sw 13-9-16w, dr 3580 ft. **Russell**—Stearns' Stielow 1, nw nw 32-11-14w, hfw 2552 ft. **Saline**—Sullivan & Sidwell's Erickson 1, ne ne 28-16-3w, sd 1800 ft. **Sedgwick**—Hudson et al's Fulton 1, ne se 35-28-1e, sd 2355 ft. Crowe et al's Murphy 1, sw se 34-29-1w, ru. **Shawnee**—Edwards' Detrich 1, c nw se 21-14-15e, sd 1130 ft. **Stafford**—Stanolind's Curtis 1, sec 31-21-12w, rust 3640 ft. Atlantic et al's Wise 1, nwc 13-24-14w, rur, dd, 3822 ft. **Sumner**—Cameron & Spencer's Frey 1, nw 5-30-1e, sd 90 ft. Hapenney's Evers 1, se ne 27-31-2e, dr 2150 ft. **Thomas**—Ramsey & Mabee's Ryan 1, c ne se 27-8-32w, dr 2115 ft. **Woodson**—Fleming et al's Central Life 1, sw 27-24-15e, dr 700 ft. Nathan et al's Ellis 1, nwc se 35-25-14e, sd 1552 ft.

SOUTH LOUISIANA

Acadia—Atlantic's Klump 1, ne of Tepetate, 12-7s-2w, dr shale 6978 ft. P. D. Freeman's Settig 2, Trilby area, 17-7s-1w, dr shale 890 ft. **Avoyelles**—Magnolia's Bowden 1, Evergreen area, 7-2s-4e, dr shale 4067 ft. **Calcasieu**—Sun's Lutcher Moore 2, Luntia area, 12-8s-13w, dr sand and shale 5755 ft. **Cameron**—Federal Royalty Co.'s State 1, Calcasieu Lake, 1-13s-9w, dr sand and shale 1101 ft. Humble's Hanszen 2, Chalkley area, 9-12s-6w, dr shale 10,671 ft. Pure's Calcasieu National Bank 2, Lowery area, 18-12s-4w, dr shale and lime 6509 ft. Union Sulphur's Miami Corp. 3, Willow Lake, 33-12s-8w, dr shale 8505 ft. **Iberia**—Texas Co.'s State 5, Fausse Point, 35-11s-8e, driving piling. **Jeff Davis**—Continental's J. Sturdivant 1, So. Roanoke, 36-10s-4w, dr shale 11,700 ft. **Lafourche**—Texas Co.'s La Terre 1, Golden Meadows, 1-20s-21e, dr sand 9900 ft; same operator's State Catfish Lake, Golden Meadows, 77-19s-21e, lcn. **Orleans**—W. T. Burton's State 1, Lake Ponchartrain ,10s-13e, dr lime 8398 ft; same operator's Faubourgde Monteluzin B-2, Lake Ponchartrain, 11s-13e, dr shale 6001 ft. **St. John The Baptiste**—Shell's Godchaux Sugars 1, La Place, 97-11s-7e, dr shale 9745 ft. **St. Landry**—Herton's Thistlewaite Lbr. Co. 1, Beggs area, 60-4s-4e, dr shale 6900 ft. **St. Martin**—Texas Co.'s St. Martin Land Co. 11, Henderson, 21-8s-7e, fsh 8912 ft; same operator's State 6, Lake Mongouloui, 10-10s-9e, dr shale 8436 ft. **St. Tammany**—Q. B. Phillip's Fuhrman 1, Goodbee area, 28-6s-10e, sd 40 ft. **Terrebonne**—Shell's Peters 1, se of Houma, 73-18s-18e, dr sand 10,167 ft. Texas Co.'s Continental Land & Fur Co. 1, Lake De Cade area, 29-18s-14e, dr shale 2605 ft. **Vermilion**—DeSoto Oil Co.'s Richardson 1, e of Abbeville, 30-12s-4e, dr shale 4298 ft. Stanolind's Stovall 2, Intra-Coastal City block, 88-14s-3w, dredging canal.

NORTH LOUISIANA

Bienville—DeSoto O&G Co.'s Mrs. B. A. Fleming 1, c nw nw 18-16n-9w, arr perf csg, td 6003 ft. Producers O&G Co.'s (Hall et al), Graves & Thomas 1, se sw se 23-15n-10w, rur. **Caddo**—F. W. Martin & Superior Oil Corp.'s Andrew Querbes 1, 37-17n-13w, setting 9⅝ in csg, td 4046 ft. R. E. Allison et al's Ellerbe 2, 28-18n-14w, dr 3510 ft. J. Thomas Driscoll, Inc.'s Woolworth 1, 19-18n-14w, rur. R. L. Bauman's Slattery Est. 1, 35-18n-14w, blew out making gas at 2550 ft, arr kill and deepen. C. D. Loe et al's 33-18n-14w, rur. Oils, Inc.'s Cazaux 1, 10-16n-13w, hole clean, sd for heavier rigs 3502 ft. **Caldwell**—Oakes et al's Kyles 1, ne sw ne 18-11n-3e, sd 470 ft. **Catahoula**—Sibley-Sabine Oil Co.'s Peck 1, 36-10n-8e, coring 1808 ft. **Claiborne**—E. T. Oakes et al's Kilgore 1, ne se 28-21n-15w, testing, td 5357 ft. Buchanan et al's Miller 1,

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11-20n-8w, lcn abn. **De Soto**—Samuel S. Alexander's Stell A-1, ne ne 5-12n-16w, coring 1896 ft. G. H. Collins et al's Joyner 2, 28-11n-12w, tested sw, sd 3001 ft. A. L. Sutton et al's Frost Lbr. Co. 1, ne se 35-11n-15w, spd and sd. **Grant Parish**—C. R. Bowers' Harrison 1, 21-8n-5w, dr 1890 ft. **Madison**—Continental's Singer Mfg. Co. 1, c ne nw 3-15n-11e, igneous rock 2227-2508 ft, dr 3971 ft. **Natchitoches**—J. E. Popkins' Peavy-Wilson Lbr. Co. 1, 36-7n-9w, sd 300 ft. **Red River**—James M. Forgotson's Marston 1, se se 30-14n-10w, spd. **Sabine**—W. L. McClanahan's Frost Lbr. Co. 1, 22-9n-13w, acidized and testing at 1616 ft, old td 5709 ft. Le Grande et al's Tatum 1, nw ne 17-8n-13w, arr set csg, td 1910 ft. Tropical Oil Co.'s Long-Bell 1, 5-8n-13w, dr 3145 ft. Zwolle Synd.'s (Moffitt et al), Mansfield Hdw. Lbr. Co. 1, ne ne 8-7n-14w, acidized, testing, td 4325 ft. **Webster**—Magnolia's Pardee C-1 c nw ne 17-23n-11w, swabbed dry, make little oil at 6025 ft, top Travis Peak 6054 ft, dr 6415 ft red shale.

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OKLAHOMA

Caddo—Texas Co.'s Smith 1, c ne nw 2-5n-12w, rig. **Choctaw**—Ross et al's Hardy 1, sec nw 21-7s-15e, sd 972 ft. **Coal**—Carter et al's Mote 1, c e½ sw nw 19-2n-9e, dr 6615 ft. **Comanche**—Eldridge's Aetna Life 1, sw se se 2-1n-10w, td 871 ft, dd. **Creek**—Burke-Greis' Goodman 1, nec sw 20-14n-7e, sd 3025 ft. **Garfield**—I.T.I.O.'s Kichin 1, c se se 17-22n-5w, dr 6150 ft. Champlin's Boehm 1, 4-24n-8w, wocs 6650 ft. **Grady**—Carter et al's Smith 1, c se sw 26-5n-8w, mim. **Hughes**—Doup et al's Bond 1, nec sw 7-7n-9e, dr 1975 ft. Cooper Drlg. Co.'s Samuel 1, nw se ne 19-6n-8e, dr 1885 ft. **Kay**—Crawford et al's Boehl 1, sec nw 34-27n-2w, dr 75 ft. **Kingfisher**—Hollenback & Haley's Zerger 1, c se sw 5-18n-6w, sd 2512 ft. **Kiowa**—Anderson & Prichard's School Land 1, c sec 14-6n-17w, dr 2155 ft. Emerson's Handcock 1, sec ne 26-6n-15w, dr 350 ft. **Lincoln**—British American's Markwell 1, c e½ e½ ne 26-12n-4e, coring 5491 ft. OK-Texas Co.'s Black 1, sec 31-16n-6e, sd 3384 ft. **Love**—Sinclair Prairie's Peabody 1, nec 35-6s-2w, dr so 7153 ft. **Noble**—Hollenback et al's Mathews 1, c sw nw 9-20n-1e, dr 4800 ft. Superior's Loula 1, ne se sw 16-22n-1e, owpb 3410-3460 ft, cement plug. **Oklahoma**—McClennan et al's Rodesney 1, c w½ sw ne 27-11n-2w, rog. **Pittsburg**—Supreme Oil Co.'s Stevenson 1, swc se 27-3n-14e, sd 1300 ft. **Pottawatomie**—Speers' Vinson 1, sw nw sw 29-8n-5e, dr 4210 ft. Hall & Briscoe's Merkle 1, nwc se 32-8n-5e, dr 1450 ft. Pace et al's Riley 1, nec se 2-9n-3e, dr 3900 ft. **Seminole**—Patterson's Konawa City Park 1, nw se nw 26-6n-5e, dr 2200 ft. Rogers & Rogers' Robinson 1, swc se 36-8n-7e, dr 1450 ft. Boettcher O. & G. Co.'s Morgan 1, se ne nw 8-5n-7e, dr 2435 ft. **Stephens**—Mitchell et al's Westfall 1, sec 33-2n-4w, br. **Tillman**—Smith's Hammel 2, ne nw nw 6-5s-15w, fsg stuck drill pipe. **Washita**—Continental's Proctor 1, c nw¼ 28-10n-20w, dr 4490 ft.

WEST TEXAS

(This portion refers to the north portion of the Permian Basin only).

Andrews County—Fuhrman Pet. Corp.'s G. O. Ashton 1, c se se PSL sec 12, blk A-42, elev 3181 ft, top anhydrite 1640 ft, top Yates 2820 ft, top lime 4070 ft, 2000 acid 4455-4465 ft, flow 30 bo per day. S. H. Forgeron-Olson Drlg. Co.'s Lockhart-Brown 1, c ne ne PSL sec 20, blk A-41, elev 3248 ft, salt series 1690-2720 ft, top brown lime 3995 ft, sul w 4913-81 ft, pb to 4770 ft, shot 700 qts, co. Montecito Oil Corp.-Rhodes et al's E. Cowden-Sinco 2, near sw ne nw T&P sec 1, blk 44, T-2-N, top anhydrite 1650 ft, dr 4178 ft. Sinclair Prairie's E. Cowden 3, near nw nw ne T&P sec 1, blk 44, T-2-N, elev 3168 ft. top Yates 2730 ft, top brown lime 3780 ft, pay 4173-4218 ft, td 4229 ft, flow 248 12 hr test. The Texas Co.'s University 1-H, nw ne sw sec 4, blk 14, lcn. J. W. Tripplehorn et al's M. A. Thornberry 1, nec PSL sec 2, blk A-42, spd and sd. H. C. Wheeler et al's Farmers State Bank (Carlton)-Gulf 1, c se sw PSL sec 18, blk A-36, mim. **Cochran County**—Magnolia's Della Wright 1, nec labor 7, league 96, Mills C.S.L. sur, dr 3660 ft. The Texas Co.'s D. S. Wright 1, near swc labor 23, league 115, Potter C.S.L. sur, elev 3791 ft, top anhydrite 2285 ft, top brown lime 3670 ft, top solid lime 4000 ft, dr 4938 ft in lime with sul w and dead oil shows, shot and co to acidize. **Dawson County**—Ray Albaugh et al's D. Hogg 1, c se se T&P sec 17, blk 34, T-4-N, elev 2895 ft, top anhydrite 1550 ft, dr by tools at 4125 ft. **Gaines County**—Atlantic Ref.'s Parker Bros. 1, c se ne W. T. Ry. sec 264, blk G, rur. R. C. Conkling, J. White et al's King 1, nec sec 6, league 305, Dawson C.S.L. sur, lcn. **Garza County**—Gulf Oil Corp.'s S. P. Swenson Cattle Co. 1, c nw H&GN sec 25, blk 2, elev 2274 ft, trace oil 6277 ft, ur 7420 ft. **Hockley County**—Gulf's Mallette L&C Co. 2, swc labor, league 34, Concho C.S.L. sur, elev 3521 ft, top brown lime 3850 ft, top solid lime 4210 ft, first oil pay 4975-4985 ft, sul w 5090 ft, pb to 5070 ft, shot 250 qts 4985-5060 ft, flow 125 bbls oil per day. Richardson Oils, Inc.'s Slaughter 2, labor 58, league 39, Maverick C.S.L. sur, elev 3551 ft, top Yates 2720 ft, top brown lime 3760 ft, top solid lime 4100 ft, pay 4933-89 ft, sdo with 2500 ft oih. Snowden-McSweeney Co.'s Slaughter 1, nwc lse, labor 74, league 35, Zavalla C.S.L. sur, lcn. Stanolind's Alex Slaughter 2, swc labor 75, league 37, Zavalla C.S.L. sur, elev 3499 ft, top Yates 2780 ft, top brown lime 3790 ft, top solid lime 4140 ft, oil pay 4957-5038 ft, used 9000 acid and flow 477 bbls oil 24 hrs. The Texas Co.'s Mallet L&C Co. 1-B, swc labor 1, league 52, Scurry C.S.L. sur, rur. Same's Slaughter 3, nwc labor 66, league 39, Maverick CSL sur, top anhydrite 2180 ft, top salt 2270 ft, top Yates 2770 ft, dr lime 4300 ft. **Kent County**—B. Dolman et al's C. V. O'Keefe 1, ne ne nw H&GN sec 50, blk 1, dr 240 ft. **Lynn County**—J. L. Baldridge et al's Almo Lumber Co. 1, ne sw sw H. E. & W. T. sec 151, elev 3267 ft, top anhydrite 2130 ft, top Yates 2900 ft, top San Andres 4170 ft, co at 4450 ft. **Martin County**—T. G. Shaw Oil Corp.'s H. N. Wilkinson 1, ne ne se sec 35, blk A, Bauer-Cockrell sur, lcn. **Yoakum County**—Alco Oil Co.'s W. N. Willard 1, nec nw sec 741, blk D, lcn. Honolulu Oil Corp.'s R. M. Kendrick 1-M, sw ne sw sec 825, blk D, ru 13-in, 335 ft. Magnolia's J. H. Flynn 1, c se ne sec 770, blk D, elev 3644 ft, top anhydrite 2170 ft, top Yates 2967 ft, top brown lime 4040 ft, top solid lime 4500 ft, dr in lime 4890 ft. H. K. Riddle-S. C. Yingling's N. Barrier-Gulf 1, c ne se sec 6, blk D, elev 3564 ft, top anhydrite 2640 ft, top Yates 3440 ft, dr 4850 ft lime.

EAST TEXAS

Anderson—Roeser-Pendleton, Inc.'s V. W. Bowyer 3 (200-ac), E. Ritter sur, Cayuga field, elev 317 ft, td 7682 ft, sdtr at 5716 ft, dr shale-lime 6791 ft. **Cherokee**—Bunn Drlg. Co.'s Callie Bounds 2 (95.9-ac), W. H. Walters sur, 2½ mi se Lone Star, elev 346 ft, cut fault 3535-45 ft, Austin chalk 3787-3969 ft, top Woodbine series 3969 ft, td 4085½ ft, sd to pump, wosr; Boling 1, W. H. Walters sur, 2½ mi se Lone Star, dr chalk 3120 ft. **Dallas**—Mauldin Oil Co.'s W. E. Howell 1 (107-ac), S. Layton sur, 8 mi east Grapevine, sd 1650 ft, sdo. Plaza Oil Co.-W. A. Brooks, Jr.'s B. J. Davidson 1 (75-ac), J. D. Merchant sur, base Woodbine 1970 ft, top Paluxy 2700 ft, sd 3528 ft, sdo. **Freestone**—G. Shyrock et al's M. S. Clark 1 (122-ac), M. De Cantona sur, 8 mi nw Teague, elev 521 ft, dr 3310 ft shale. **Gregg**—Humble & Gulf's P. Horton-Dixon 1, H. G. Hudson sur, Trinity test, 3 mi e of E. Texas field, elev 275 ft, Pecan chalk 2261-2752 ft, Austin chalk 3309-38 ft, Georgetown lime 3333-4107 ft, top anhydrite stringer 5596 ft, co 6570 ft. **Henderson**—Humble's J. J. Hearne 2 (208-ac), W. K. Newell sur, dr and cor 3041 ft. D. T. Davis et al's J. P. Tarkington 1 (39-ac), W. K. Newell sur, lcn. Peyton Bros. et al's W. W. Carter-Tarkington 2, W. K. Newell sur, elev 326 ft, ru and sd. The Texas Co.'s J. P. Tarkington 1 (50-ac), W. K. Newell sur, dr 1510 ft. **Houston**—Humble's J. A. Hill 1 (161-ac), blk 4, J. L. Reviere sur, A-49, Navarro Crossing pool, Pecan chalk 4262-4370 ft, cor shale and sand 5903 ft, no shows. Sun Oil's Dailey Bros. 2 (1366.7-ac), J. G. Thompson sur, lcn. **Kaufman**—Sam Knoerr et al's J. P. Hunter 1 (17-ac), P. Walker sur, 5 mi s Terrell, drk. W. G. Martin et al's Fee 2 (40-ac), W. F. C. Butler sur, 2½ mi ne Kemp, 2472, wtr sand 3104 ft, to dd and test. W. S. McGee et al's Pritchett 1 (15-ac), J. Hendricks sur, 7 mi w Mabank, Austin chalk 2292-2470 ft, top Woodbine 2994 ft, mim, td 3104 ft. J. F. McLaughlin et al's Wood-Nash 1, J. C. Cortez sur, ¾ mi se Scurry, drk. **Lamar**—Dahl Bros. & Barr's Lewis-McCuistion 2 (10-ac), R. Russell sur, 1 mi ne Paris, elev 523 ft, ru. **Leon**—Lone Star Gasoline Co.'s Steve Pate 1, D. J. Haskins sur, 8 mi se Buffalo, fsg 4226 ft. T. J. Tucker et al's Sam Vane 1 (60-ac), Jas. Webb sur, 4½ mi se Keechi, spd and sd. Wayne Drlg. Co.'s H. L. Brown-Sinco 1 (43½-ac), Joseph Brown sur, ¾ mi nw Keechi, dr shale 3133 ft. **Navarro**—Mrs. Jane Robinson et al's Fortson 1, Eli Smith sur, 5 mi ne Corsicana, elev 345 ft, Austin chalk 1346-1585 ft, top Woodbine 2185 ft, sd 2765 ft in lime. **Rains**—McKinley & Hastings' McTaggert 1 (21-ac), B. Miller sur, 1 mi w Emory, lcn. **Red River**—Bentley-Sheppard & Steven's Southern Pine Lumber Co. 1, Geo. S. Parks sur, 17 mi n Clarksville, spd to 71 ft and sd. Daniels et al's J. J. Gaston 1 (657½-ac), J. Guest sur, 2 mi s Detroit, elev 468 ft, sdo at 1025 ft. Watters et al's J. Phamplin 1, Wm. Moore sur, 3 mi se Kanawha, elev 470 ft, Pecan chalk 78-85 ft, top Red Beds, 450 ft, dd to 550 ft and sdo. C. E. Whitehead et al's R. H. Ringwald 1 (56-ac), A. Moore sur, 1 mi nw Manchester, spd to 630 ft and sdo. **Rusk**—Thos. L. Johnson-Drake Drlg. Co.'s R. L. Needham 1 (136-ac), Jessie Chambers sur, 3 mi sw Lanesville, elev 319 ft, mim. **Smith**—Combest, Wadsworth & Cox's D. Kendall 1, John Williams sur, 1¼ mi se Jamestown, dr to 3215 ft, sdo. **Van Zandt**—F. A. Richardson et al's B. C. Dodd 1 (180-ac), T. W. Hutchinson sur, 2 mi s Grand Saline, elev 427 ft, sd. W. S. King et al's Edna Watson 1, M. G. Whitaker sur, 5 mi s Grand Saline, elev 489 ft, sd at 2200 ft.

SOUTH TEXAS

CORPUS CHRISTI DISTRICT

Aransas—Housh & Thomson's Kent-Crane 1, Hollis sur, prep sp. **Bee**—Pettus' Ray 1, Mangum sur, lcn. **Calhoun**—Hiawatha's Roemer 2, Ogsberry sur, wocs, 7610 ft, set 8⅝ in protection casing. **Goliad**—Sun's Shaper 1, Payne sur, cor 6500 ft. **Hidalgo**—Harding's Card 1, Hidalgo Canal srbd [illegible]. Johnson's Daskam 1, por 45, dr below 4140 ft. Phillips' Flores 1, por 39, cor below 8000 ft. **Jackson**—Magnolia's West A-4, Ramon Musquiz gr, lcn. **Jim Wells**—Gulboard-Bennett's Forry 1, La Vaca gr, dr 4000 ft. Humble's Belitz 1, sur 202, dr below 2000 ft; **True** 1, Garza gr, cor 5000 ft. Magnolia's Garcia 1, La Anima Sola gr, dr 6500 ft. Shell's Blucher 1, Best sur, dr 7200 ft. Smith & Mc-

Dannald's Rooney 1, Casa Blanca gr, cor 5900 ft. Transwestern's Dunlap 1, sur 181, dr in sdtr hole, otd 5107 ft. **Live Oak**—Gravis' Minnetez 1, Live-Bee subd, dr 1100 ft. Holland's West 2, Ragland sur, dr 3500 ft. Turner's Federal Bank 1, Turner sur, dr 500 ft. Wellington's Sanger 1, sec 349, dr below 600 ft. **Nueces County**—Phillip's Mastin 1, sec 146, prep sp. Seaboard's Chapman 7, Corpus Christi gr, dr 5000 ft. Texas' Little 1, Little sur, dr below cond. pipe. Union's Brown 1, Fuentes sur, dr heaving sh below 10,890 ft, did not run liner. **Refugio**—Austin & Heard's Hunsdon 1, Lopez sur, ru. **San Patricio**—Illinois & Dunn's Wilson 1, Morris sur, dr 2300 ft.

LAREDO DISTRICT

Duval—Anderson's Volpe 1, El Mesquite gr, dr 2000 ft. Cosner's Garcia 1, sec 409, dr below sur csg. Daubert & Gorman-Yoakam's Corbett 1, sur 176, cor below 1150 ft last rept. Hiawatha's Southland 11, Santos Flores gr, dr 4800 ft. Magnolia's Duval Ranch 1, sec 267, sp. Schwab & Keller's Sutherland 1, sur 68, mim and ru. Smith & Story & Gier's Peters 1, sur 175, lcn. Stewart & Nye's Welder 1, sur 213, sp. Texas Inland's Adami 1, sur 47, lcn. **La Salle**—Lake-Tobian's O'Connor 1, O'Connor Ranch, wocs sur csg. **McMullen County**—Barbara's Edrington 1, sec 79, ru. Ezzell's Fee 22, sec 25, Ezzell subd, sp. Kirby's Chylek 1, Hernandez sur, mi larger ds to dd, td 1210 ft. Petroleum Producers, Nueces 1, sur 120, lcn. Spice's Edrington 1, sur 57, dr 2400 ft. **Starr**—Giblin's Guerra 1, por 69, dr below 300 ft. Graham's Gutierrez 1, por 88, dr 3000 ft. Harvey & Henderson's Salinas 1, Sacatosa gr, dr below sur csg. Magnolia's Fee-Guerra 1, Farias gr, cor below 5850 ft. **Webb County**—Jones' Bruni 1, Albercas gr, dr 2700 ft.

SAN ANTONIO DISTRICT

Atascosa—Stanley, Schumann 1, Stephens Ranch, td 1100 ft, coring below. **Bastrop**—Paul C. Teas, Grizzard 1, Graham League, dr below 6550 ft. **Bexar**—Blackburn, Miller 1, sur 324, spud. Noak, Oppenheimer 1, Miller sur, crg 778 ft. Philtop, Patton 3, Rodriguez sur, td 1111 ft, still swabbing making some water with 15 gravity black oil. **Blanco**—Johnson, Glasscock 1, sec 50, td corrected 500 ft, shut down. **Caldwell**—Banks Miller, Martindale 1, McNeil sur 18, td 3225 ft, dry and abd. Nytex, Bridges 1, Floyd sur, dr 865 ft. Tinkle, Blackwell 2, Roe sur, comp, pump, no gauge, td 2312 ft. **Frio**—Humble, Schley 1, Travalder sur 174, dr 5560 ft. **Guadalupe County**—King's Rosenbrock 1, Duran sur, dr below 900 ft. Marts & Beaven's Glenwinkle 1, Wakefield & Stewart sur, ru. Williams' Weber 1, Torres sur. **Kendall**—Carpenter's Seidensticker 1, sur 131, dr below 500 ft. Reed's Marquart 1, Traviesso sur, ran 8-in csg to 600 ft, to shut off water. **Kimble County**—Plateau's Bolt 1, sur 42, prep test oil show 1420-35 ft; Davis 1, sur 44, sd 705 ft; Hunger 1, sur 43, fsg 1600 ft. **Lee County**—Pederson's Brown 1, Hudson sur, dr 3500 ft. Tarver's Lawhon 1, Nantz sur, sd 3345 ft. **Maverick County**—Humble's Indio 1, Antonio Rivas gr, bldg dk. Lockhart's Asbrook 1, sur 83, dr below 3300 ft. **Medina**—Gaston's Rogers 1, Wilson sur, dr 400 ft. Killian, Cruseturner & Martin's Wiemers 1, sur 51, dr 800 ft. Stieren's Hoeglin 1, sur 335, wocs, ran protection string. Whitfield & Draper's Ulbrich 1, sur 205, ru. **Travis**—Anderson's Teichelman 1, Jett sur, dr 2500 ft.

TEXAS GULF COAST

Brazoria—General Crude's Campbell 1, se flank of West Columbia, J. H. Bell sur, mim. Sterling's Kramer 1, flank test at Stratton Ridge, T. W. Grayson sur, woc 4500 ft. **Chambers**—Salt Dome's Ogden 1, s of Anahuac, E. Douthit sur, mim. **Galveston**—Midwest Royalty Corp.'s L. Lobit 1, League City area, Berry & Austin sur, spudded. **Harris**—Continental's Sweeney Estate 1, Ogburn sur, W. C. R. R. sur, mim. Humble's Keller 1, Crosby area, W. Whitlock sur, abn 8000 ft. **Jefferson**—Geo. H. Echols et al's American National Bank 1, Lovell Lake area, J. J. French sur, dr shale 7500 ft. Humble's McFaddin-State B-8, McFaddin Beach prospect, in Gulf of Mexico, dr shale 2825 ft. **Liberty**—Wallace Oil Co.'s League 1, Davis Hill, M. De Los Santos sur, abn 5612 ft. **Matagorda**—Maja Oil Co.'s Ribbins 1, e of Palacios, A. Sheppard sur, mim. Ohio's Cornelius 1, n of Markham, P. C. Yarborough sur, making 169 barrels fluid daily, 7230 ft. **Montgomery**—C. G. K. M. Oil Co.'s Floyd Oil Co. 1, sw of New Caney, W. C. R. R. sec 11, mim. Deep South Pet. Co.'s Foster Lbr. Co. 1, ne of New Caney, Pryor Bryan sur, dr shale 3831 ft. Frazier & Bunte's Chase National Bank 1, sw of Conroe, D. Garrett sur, dk. D. B. MacDaniel's Flemming 1, sw corner of county, T. J. Randall sur, dr shale 5500 ft. **Newton**—Republic's Sabine Tram Co. 1, northwest of Starks, I. Garner sur, abn 7032 ft. **Liberty**—J. G. Mayo's Roberts 1, sw of Ace field, J. F. De Rumayor sur, dr shale 5043 ft. **Orange**—Sun's Lutcher Moore 1, n of Orange, B. Johnston sur, dr shale 1950 ft. **Washington**—Speed Oil Co.'s Makousky 1, Greenvine area, D. McIntyre sur, dr salt water sand 5125 ft. **Wharton**—Western Gulf's Rust 1, ne of McCroskey, A. Jackson sur, dr shale 2020 ft.

ROCKY MOUNTAIN STATES

COLORADO

Elbert—Plymouth Oil Co.'s Brosky-Union Pacific 1, csw sw sw 19-10s-60w, dr 4000 ft, 13⅜-in csg 1219 ft. **Huerfano**—J. W. Tomkins & Son's Fee 1, nw ne ne 10-29s-96w, Oakview district, 50 bbls fluid 10 percent water 412 ft, 43 degree gravity oil. **LaPlata**—Nick Spatter's Bryce X-1, se sw sw 31-33n-9w, dr 1726 ft. **Las Animas**—Garcia Corporation's McClung 1, ne nw se 19-33n-61w, dr 2500 ft. **Prowers**—Continental Oil Co.'s Rosabell Ruby 1, cne nw 31-21s-44w, td 5199 ft, cementing cavey hole, Cherokee shale, 5055 ft. **Pueblo**—Eden Oil & Gas Co.'s Horse Creek Land & Cattle Co. 1, sw se 29-19s-64w, dr 940 ft.

MONTANA

Blaine—Montana Gas Corporation's Duncan 1, cnw se 6-32n-24e, dr 100 ft. R. E. O'Keefe's Tetter 1, csl sw se 10-31n-18e, loc. **Carbon**—R. C. Tarrant's Heare 2, nw se nw 14-6s-19e, running 8¼-in 2360 ft. **Petroleum**—O. B. Canfield's Government 2, se se ne 21-17n-24e, dr 755 ft. **Phillips**—Treasure State Pool Oil & Gas Co.'s Government 1, cse sw 2-24n-23e, skidding rig after losing hole at 560 ft. **Richardson**—W. M. Fulton's Richardson 1, sw sw se 26-26n-52e, dr 500 ft. **Teton**—California Co.'s Unit 1, ne se sw 26-27n-9w, dr 973 ft. Gulf States Oil Co. and Zodiac Oil Co.'s Wallenstein 1, sw sw sw 5-27n-9w, fsg 2525 ft. **Yellowstone**—Signal Oil & Gas Co. is preparing to take over Broadview Dome Oil Co.'s Stoltenburg 1, ne ne sw 18-3n-23e, td 4565 ft, and deepen to Devonian. Riverton Oil Co.'s Fox 1, cel nw ne 14-2n-23e, dr 1510 ft.

WYOMING

Big Horn—John H. Thomas' Government 1, sw sw se 3-54n-94w, dr 50 ft. **Carbon**—Cunningham Oil Co.'s Wolfe-Union Pacific, se nw sw 7-33n-78w, dr 200 ft. **Niobrara**—W. A. Maupin's Berggren 1, nw 23-35n-63w, dr 1523 ft. **Platte**—Bill Griffin's Fee 1, ne se ne 18 30n-67w, dr 50 ft. **Sublette**—Frontier Petroleum Co.'s Government 1, se se sw 1-28n-114w, dr 3900 ft. **Washaki**—Frison Oil Co.'s Government 1, cnl se se 24-47n-90w, 176 ft.

Want a TOUGHER rotary brake LINING?

Get the NEW J-M 420!

THREE important steps in making J-M 420 Rotary Lining are shown in the photo above.

The "cabled" asbestos yarn at the extreme right has been specially processed for extra strength. It is tightly woven into a dense, compact fabric; compressed and impregnated with a newly developed compound that has high resistance to heat. The result is a lining that is giving unusual service on rotary brakes. J-M 420 Rotary Lining has these important advantages:

UNUSUALLY EVEN FEED-OFF, giving better control of drilling . . .

HIGHER BRAKING EFFICIENCY, even at extreme temperatures caused by heavy loads . . .

LONGER LIFE under any conditions . . .

LESS SCORING OF DRUMS, giving longer drum life.

In the short time since the new J-M 420 was introduced, this rugged, lasting lining has sold both owner and driller on its superior braking performance. For full details on J-M 420 Rotary Lining and on all J-M Friction Materials, write Johns-Manville, 22 East 40th Street, New York City.

Johns-Manville 420 ROTARY LINING

NEW PRODUCTS FOR THE FIELD
Machinery • Tools • Equipment

ELECTRIC ARC WELDER

Owen-Dyneto Corporation

Owen-Dyneto Corporation, Syracuse, New York, has recently placed on the market a new alternating current welding machine, known as the "USL Protected Arc AC Welder." It is designed to connect to any standard voltage or frequency power line. It is rated at 150 amperes and has a range from 30 amperes to 280 amperes output. Open circuit voltage of 55 volts maintaining 20 volts to 30 volts across the arc.

The arc welder is constructed in various details so as to speed up the welding process. It accommodates any commercial kind of AC welding rod. It is built to give thorough penetration for heavy work, yet it can be cut down to lower heat requirements for welding thin sheets. A steady arc is secured by means of a reactor on the secondary winding of the transformer. This stabilizer creates a power influx where the cycle passes the zero point. The arc is therefore constantly maintained and results in faster, easier welding with noticeably less spatter loss. Simplicity of control is emphasized by the single dial which permits of setting the machine to the requirements of the work at the beginning and operating it without further attention. The use of jacks or plugs to secure change of current is avoided. It is free from relays and magnetic switches, and has no moving parts whatever. In appearance the new unit is very compact. Its case has crackle finish in black. Two stout handles and four large casters make it easy to move. The total weight is 190 pounds.

EYESHIELD

Jackson Electrode Holder Company

Jackson Electrode Holder Company, Detroit, Michigan, has recently introduced to the market a new type eyeshield, consisting of a flexible, transparent, non-inflammable visor, recommended for welders, etc., by safety engineers.

This new eyeshield is obtainable in clear, smoked, light green, dark green or amber shades, adjustably hinged to a light headgear. No part of it rests on the nose or ears, making it very comfortable to wear. It does not interfere with eye glasses, and ample ventilation eliminates fogging. Protection is afforded from front and both sides by the transparent visor, which is economically replaced if ever

RECTOX RECTIFIERS FOR CATHODIC PROTECTION

Westinghouse Electric & Manufacturing Company

To counteract and practically eliminate galvanic action or electrolysis of underground pipe lines, cables, etc., a copper-oxide rectox rectifier developed for cathodic protection is announced by Westinghouse Electric & Manufacturing Company, East Pittsburgh, Pa.

These rectifiers have a rating range from 3 to 50 volts, 1 to 125 amperes d-c. output. They consist of the necessary rectox units for the desired rating, together with a two-winding transformer, disconnect switch, and terminal board, all mounted on sheet-steel ventilated cabinet designed in some cases for outdoor use and in others for indoor use.

How much current and voltage is needed to protect a given length of pipe line can only be found out by actual trial, due to the variation in resistivity of coating and of soil condition already mentioned. Usually it has been found that if the pipe can be maintained negative to the earth by 0.3 volts or more, corrosion will be stopped.

The Rectox Copper-Oxide rectifier requires no maintenance as there is nothing to wear out and no attention beyond the occassional check of output which is required anyway due to the seasonal variations in soil and coating resistivity. The Rectox can be mounted in a weather-proof cabinet permitting pole mounting if desired along the right-of-way. It has no rotating parts and operates entirely without noise. An extremely important characteristic is that it operates without causing radio interference.

HOLD-OVER

The National Supply Company

The National Hold-Over (Patented) has recently been placed on the market by The National Supply Company,

National Hold-Over.

Toledo, Ohio. It is offered as a simple, effective and economical means of securing slight angularity in pull rod lines where a conventional type rod line swing is not considered necessary. The complete hold-over unit consists of two bearing connections held together by a length of pull rod. This rod acts in tension to hold the rod line to the desired angle. The pull rod length is conveniently varied to meet conditions.

The connection for the post end may be furnished for attachment to either 4-inch standard pipe or 5-3/16-inch casing. On the pull rod end bearing connection, the connections for the rod line are attached to the link with pins, rather than a rigid connection. This permits the use of a solid link with a relatively large bearing and at the same time permits self-alignment of the rod line. The pull rods are held firmly in the connections by split bushings which fit snugly around the heads of the rods. This simple arrangement requires little attention, and is easy to assemble. Bushings for all sizes of A.P.I. pull rods are available. A special link for combination clamp stirrups can be furnished on order. Connection bearings are Alemite lubricated, and carry renewable steel shafts.

SPRAY GUN

Eclipse Air Brush Company

A new spray gun, known as the Eclipse GAT, has been announced by Eclipse Air Brush Company, 390 Park Avenue, Newark, N. J.

The main feature of the new gun is speed coupled with lightness of weight. It operates by either internal or external atomization, the change being effected by a change in nozzle.

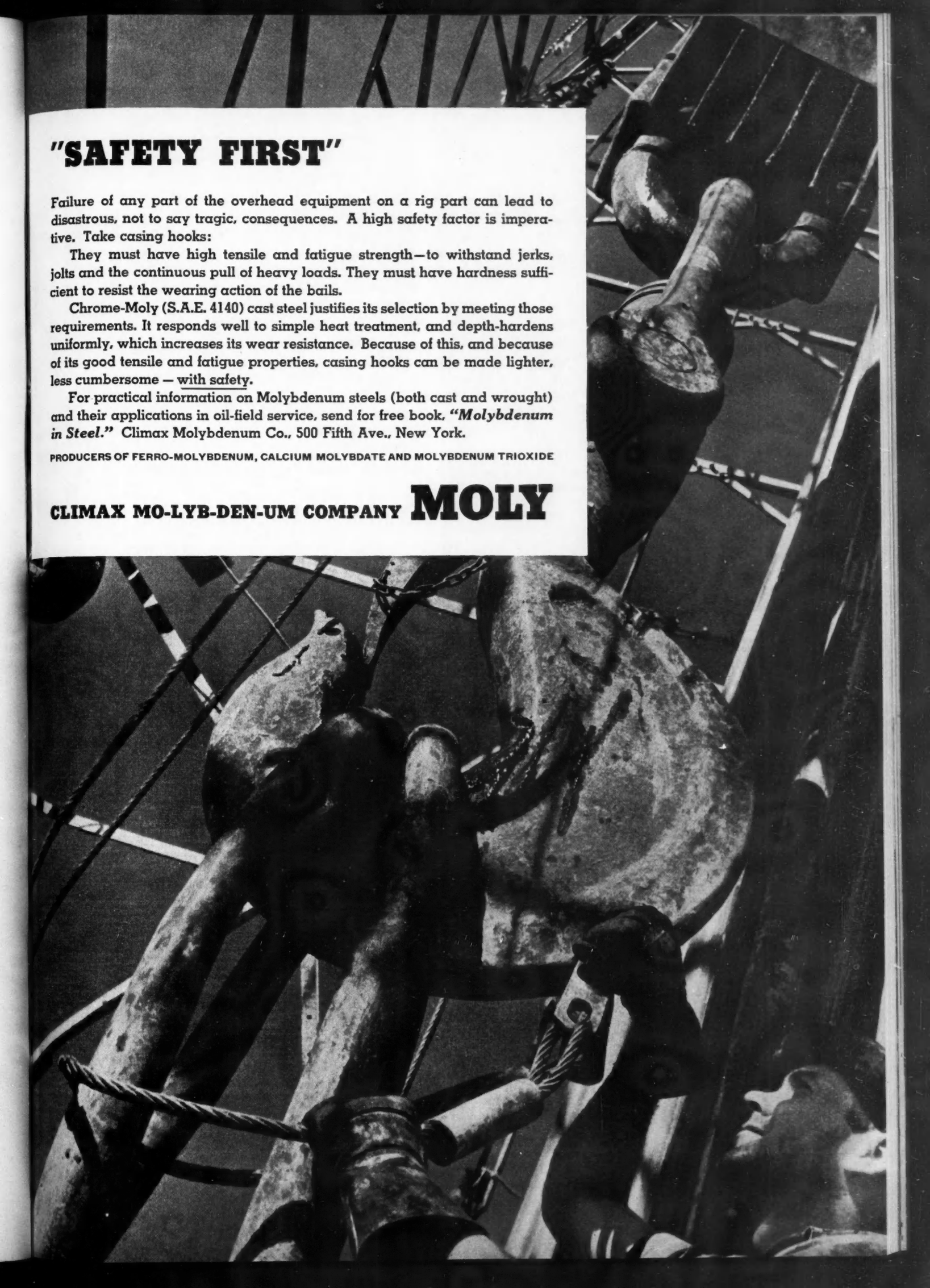
Nozzles are available for all purposes and materials. Widths of spray vary from 1 to 36 inches, depending on requirements and viscosity of material. Heavy paint can be sprayed at lower pressures; and many materials, hitherto considered outside the capabilities of spray equipment have been successfully applied. Excellent results have been obtained with nitrocellulose and synthetic lacquers, as well as with paints, varnishes and enamels.

HEAVY DUTY ROLLER BEARING

Bantam Bearings Corporation

A new type heavy duty needle roller bearing known as The Standard Quill Bearing has been announced by Bantam Bearings Corporation, South Bend, Indiana. This bearing is the result of many years experience in the manufacture of needle rollers for use in automotive transmissions, universal joints, Diesel engine wrist pins and many types of heavy-duty machinery. It is said to possess a number of outstanding features, some of which are as follows:

The ordinary assembly of outer race with hardened retaining



"SAFETY FIRST"

Failure of any part of the overhead equipment on a rig part can lead to disastrous, not to say tragic, consequences. A high safety factor is imperative. Take casing hooks:

They must have high tensile and fatigue strength—to withstand jerks, jolts and the continuous pull of heavy loads. They must have hardness sufficient to resist the wearing action of the bails.

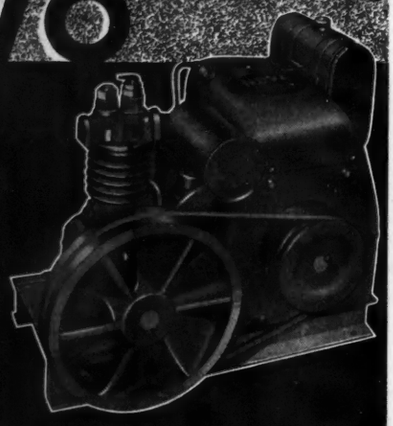
Chrome-Moly (S.A.E. 4140) cast steel justifies its selection by meeting those requirements. It responds well to simple heat treatment, and depth-hardens uniformly, which increases its wear resistance. Because of this, and because of its good tensile and fatigue properties, casing hooks can be made lighter, less cumbersome — with safety.

For practical information on Molybdenum steels (both cast and wrought) and their applications in oil-field service, send for free book, *"Molybdenum in Steel."* Climax Molybdenum Co., 500 Fifth Ave., New York.

PRODUCERS OF FERRO-MOLYBDENUM, CALCIUM MOLYBDATE AND MOLYBDENUM TRIOXIDE

CLIMAX MO-LYB-DEN-UM COMPANY MOLY

NOVO



SALES AND SERVICE BY

National SUPPLY COMPANY

• NOVO COMPRESSOR FOR DIESEL, OIL AND GAS ENGINE STARTING •

A complete line of engine-driven, starting units. Power units are water and air cooled. . . All outfits are standard equipped to operate on either natural gas or gasoline. . . Hundreds of these units are now operating in the oil fields. . . . Call any National Supply Company Store for sales service or information. . . See complete listing in Composite Catalog.

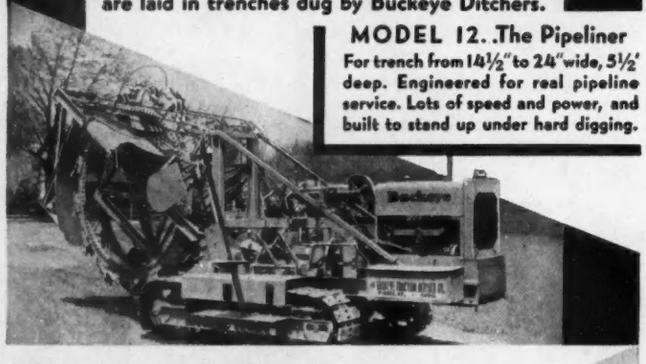
PUMPS • ENGINES • GENERATORS • STARTING UNITS

NOVO ENGINE CO.
247 Porter Street
LANSING • MICHIGAN

Rely on Buckeye DITCHERS

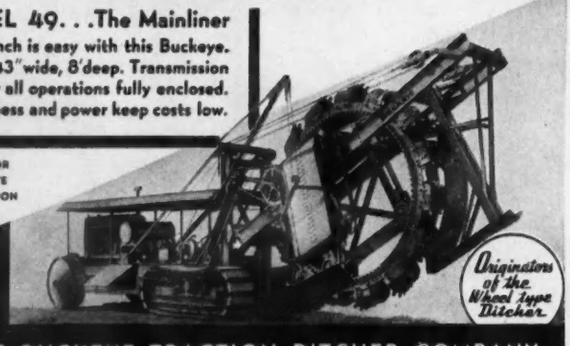
The most important pipelines the world over are laid in trenches dug by Buckeye Ditchers.

MODEL 12. .The Pipeliner
For trench from 14½" to 24" wide, 5½' deep. Engineered for real pipeline service. Lots of speed and power, and built to stand up under hard digging.



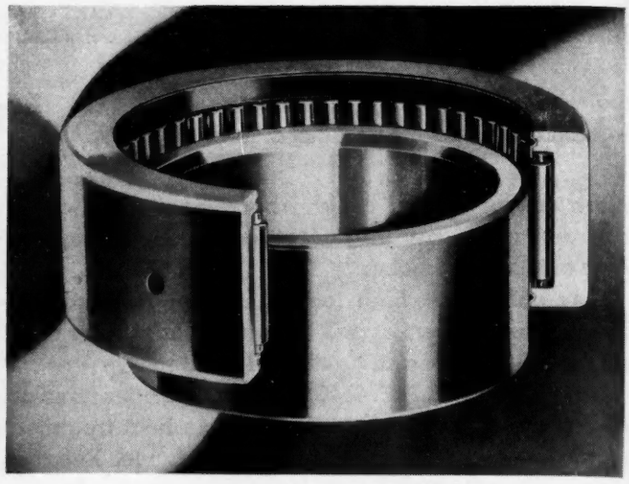
MODEL 49. . .The Mainliner
BIG trench is easy with this Buckeye. Digs to 43" wide, 8' deep. Transmission drive for all operations fully enclosed. Ruggedness and power keep costs low.

WRITE FOR COMPLETE INFORMATION



Originators of the Wheel Type Ditcher

THE BUCKEYE TRACTION DITCHER COMPANY
FINDLAY, OHIO



Bantam Heavy Duty Bearing

rings, washers, stampings, etc., has been supplanted by a one-piece, rigid, channel-shaped outer race in which a full complement of small diameter rollers is firmly held.

A spring steel band is employed to maintain the rollers and outer race as a unit during assembly but is not called upon to carry any load while operating.

The rigid rib surfaces of the outer race are accurately hardened and ground, thereby keeping rollers in perfect alignment. Rollers are correctly proportioned to the pitch diameter involved and are made with husky curvilinear trunnions.

The load capacity is high. Space required is at a minimum. The design is considerably simplified and all fragile parts have been eliminated. Assembly is easy. The bearings are available either with or without inner races.

SEMI-PORTABLE AND PORTABLE COMPRESSOR

Ingersoll-Rand Company

Ingersoll-Rand Company, Phillipsburg, New Jersey, offers to the industry a new compressor delivering 425 cubic feet of air per minute. Known as Model 425, it is a self-contained compressor-plant, available in portable or semi-portable mountings. Employing the same slow-speed, heavy-duty, stationary-type compressor usually purchased for permanent installation, it is unique in the economy of its operation and the durability of its construction.

A four-cylinder, heavy-duty tractor-type engine drives the compressor through simple reduction gears. Either gasoline, gas or oil engines can be furnished.

WRENCH SET

J. H. Williams & Co.

J. H. Williams & Co., 75 Spring Street, New York, has recently announced a new set of detachable "Supersockets" for use with hollow-screws. This set, composed of bits, parts and handles, is designed to replace the L-shape wrenches of hex bar steel and provide greater speed and convenience in driving hollow screws.

Williams "Supersocket" AL-101 Wrench Set.

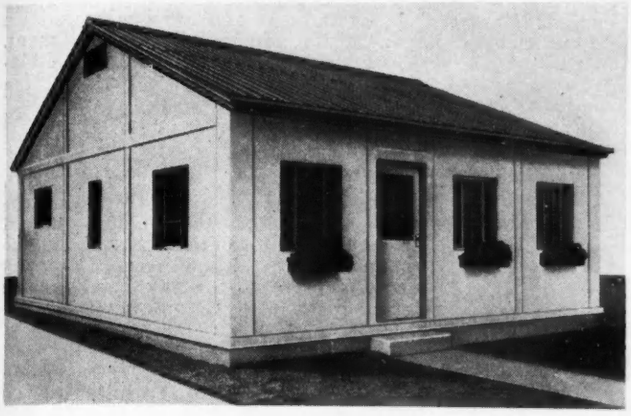
Set A-1-101 contains 19 pieces: 10 bits for handling hollow (hex socket) set screws, ¼ to 1⅜ inches, and hollow cap screws, No. 8 to 1 inches. These bits have a knurled end for fast spinning of screws until they become tight enough to be turned with the handle, or driver. Also, 9 handles and parts, including 2 reversible "Superratchet" handles and the new torque "Measurrench" No. B-21. The "Measurrench" provides an efficient tool for measuring right-hand turning torque and enables the operator to tighten hollow screws to the proper degree without danger of overload. The set is supplied in fitted steel case.

METAL LEASE HOUSE

Columbian Steel Tank Company

Columbian Steel Tank Company, Kansas City, Missouri, has recently introduced a new metal lease house, designed to give fireproof and portable features of steel construction, plus attractiveness for housing employes in oil field camps.

The outside wall panels are fabricated from 16-gauge steel, and the windows installed directly in the panels. The corner columns and intermediate columns are made from heavier 14-gauge steel and are bolted directly to the foundation. The panel sections slip in between these column sections with a 1-inch insulating board built into the panel so there is no cutting or fitting to do on the job.



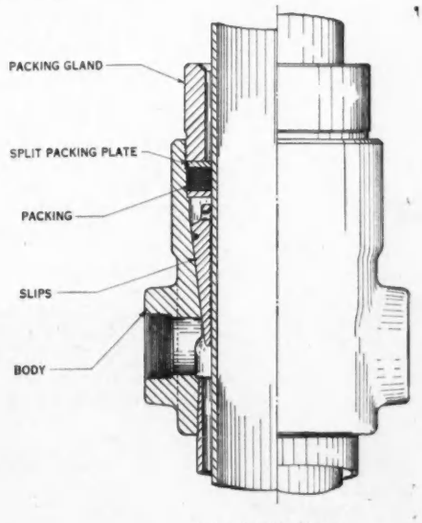
Columbian Steel House

One particular model is 26 feet by 24 feet and includes a large combination living room and dining room, two bedrooms, bath and kitchen. Adequate closet space is provided, and by closing a door in the hallway, bedrooms and bath may be shut off from the living room.

CASING HEADS

The National Supply Company

The National Supply Company, Dallas, Texas, has recently introduced the type "KH-1" casing head for medium-pressure service.



KH-1 CASING HEAD

This head is of the slip suspension type which permits setting casing at any depth without cutting special casing nipples. One large packing packs off the area between the body and the inner string. This is located above the slips and is entirely independent of the weight of the casing. The packing gland will pass over casing couplings, making it unnecessary to remove the coupling in order to install the packing. This packing is confined between split packing plates and is of Neoprene which is not decomposed by oil.

THE *Garlock* KLOZURE

Hundreds of designing and operating engineers are wise to this superior oil seal. They are using the Garlock KLOZURE under severe conditions and find that it does everything we claim for it—resists oil and water, is unaffected by high temperatures, does not become soft and flabby in service and gives long, uniform performance.

The KLOZURE sealing ring is not leather, cork, felt or fibre. It is made from a compound developed by Garlock especially for oil seal service. This compound is non-porous, non-abrasive, tough and durable. Being inherently resilient, it does not require heavy spring loading.

Write for catalogs!

THE GARLOCK PACKING CO.
Palmyra, N. Y.

Tulsa, Okla.
Houston, Texas
Los Angeles, California

SPLIT-KLOZURE

Dismantling of heavy machinery is unnecessary when installing the new Garlock SPLIT-KLOZURE which is applied around the shaft in the same manner as a packing ring. It is a time- and money-saver. Like the standard solid KLOZURE, the Garlock SPLIT-KLOZURE is furnished in a complete range of sizes.

GARLOCK

Standco
NO-SMOKE
STANDCO BRAKE LINING
Nothing novel—no bunk—but it gets the job done without scoring brake rims. See page 1940, Composite Catalog.
Standard Brake Lining Co.

SPECIALTY OIL TOOL COMPANY SOTCO USA
SCIVALLY BROS.
RENTAL SERVICE
SOTCO ROTARY FISHING TOOLS
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● Complete Stock of Fishing Tools for any emergency.
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Specializing in the manufacture of High Quality
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Molded, Mandrel and Extruded Packers and Washers
Houston's Only Exclusive Jobbing Manufacturing plant. Equipped with Calender, Mill, Tuber, Presses and Pot Vulcanizers.
FACTORY TRAINED MEN
1822-24 Washington Ave. Houston, Texas

This Week with the Industry's EQUIPMENT SUPPLIERS

Frye Heads Union Wire Rope's Houston Branch

Union Wire Rope Corporation of Kansas City, which recently opened a new branch at 5805 Navigation boulevard, Houston, to serve distributors and customers in the Texas and Louisiana Gulf Coasts, Mississippi, Alabama, Mexico and South America, announces appointment of H. E. Frye, formerly of Portland, Oregon, as Gulf Coast manager.

The above location is a temporary one, pending completion of permanent quarters upon which construction is scheduled to start soon. Plowden Supply Company, 2300 Navigation boulevard, is distributor for Union wire lines in the Houston area.

H. C. Smith Oil Tool Company Moves Headquarters to Dallas

H. C. Smith Oil Tool Company has moved its general office from Wichita Falls to Dallas where headquarters have been established in the Gulf States Building. Branch offices in producing centers are planned for service to Arkansas, Texas, Louisiana, New Mexico, Oklahoma and Kansas.

J. D. Roberts Opens Fort Worth Office for Okmulgee Supply

J. D. Roberts, secretary of Okmulgee Supply Corporation for the past nine years, has been appointed district manager with headquarters at the company's new district office at Fort Worth, Texas. Offices have been opened in Petroleum Building to serve the company's customers in North Texas, northwestern Louisiana, southwestern Arkansas and New Mexico. The company distributes a wide line of tubular goods, pumping equipment, wire lines, industrial paints and pipe line coatings, electric motors and gas engines, and a general line of used oil field equipment. Headquarters are at Okmulgee, Oklahoma.

John Pearce Joins Pittsburgh Screw & Bolt Corporation

The Pittsburgh Screw & Bolt Corporation announces appointment of John Pearce, formerly sales and service engineer with National Acme Company as a member of the sales and service department of its Colona Division.

Lane-Wells Company Has Expansion Program; Lane Retires

Extensive changes in personnel, duties and progressive plans for new company development and expansion were announced by Walter T. Wells, president of Lane-Wells Company, effective September 15. Coincident with this is the disclosure by W. G. Lane of his retirement from active participation in and management of the company.

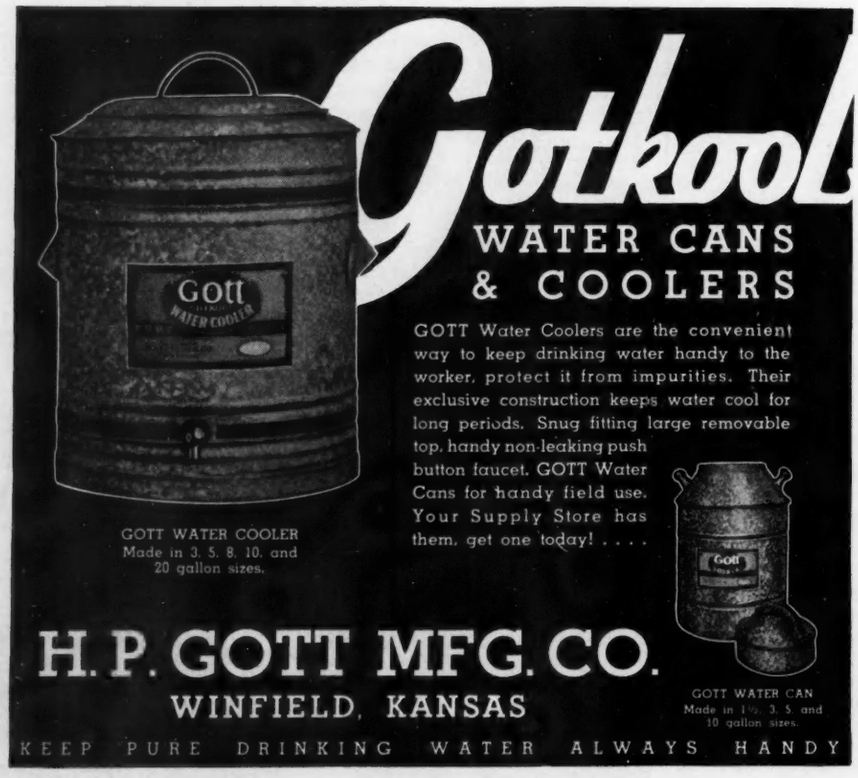
Rodney S. Durkee, formerly comptroller of Socony-Vacuum Oil Company, Inc., of New York City, and for many years associated as officer and director of major oil companies, has been elected executive vice president with offices in Los Angeles.

Norman L. Dorn, chief engineer in charge of operations, and M. E. Montrose, manager in charge of Gulf Coast Division, have been elected to the board of directors, which includes, in addition to Wells and Durkee, Miss B. G. Peters, who has been a member of the board since the company was organized. These additions bring to the board of directors men long experienced in oil field service operation, and give representation to every division of the company's engineering and field organizations.

Attendant to this change of personnel is the announcement of sale of 58,006 shares additional Lane-Wells Company stock, proceeds to be used to retire bank loans and to provide working capital. New equipment is to be constructed consisting principally of truck units for the extension of gun perforating and electrolog services in the Coast and Mid-Continent fields.

Blyth & Company, Inc., is heading a group of investment bankers, consisting of Paul H. Davis & Company, Dean Witter & Company, E. H. Rollins & Son, Inc., and William R. Staats Company, which is underwriting the stock issue.

Sale of Lane-Wells products and services have reached an annual volume of more than $2,000,000, according to Wells, and the general condition of the oil industry presages a continuance of these conditions for 1939. In anticipation of an increased demand for the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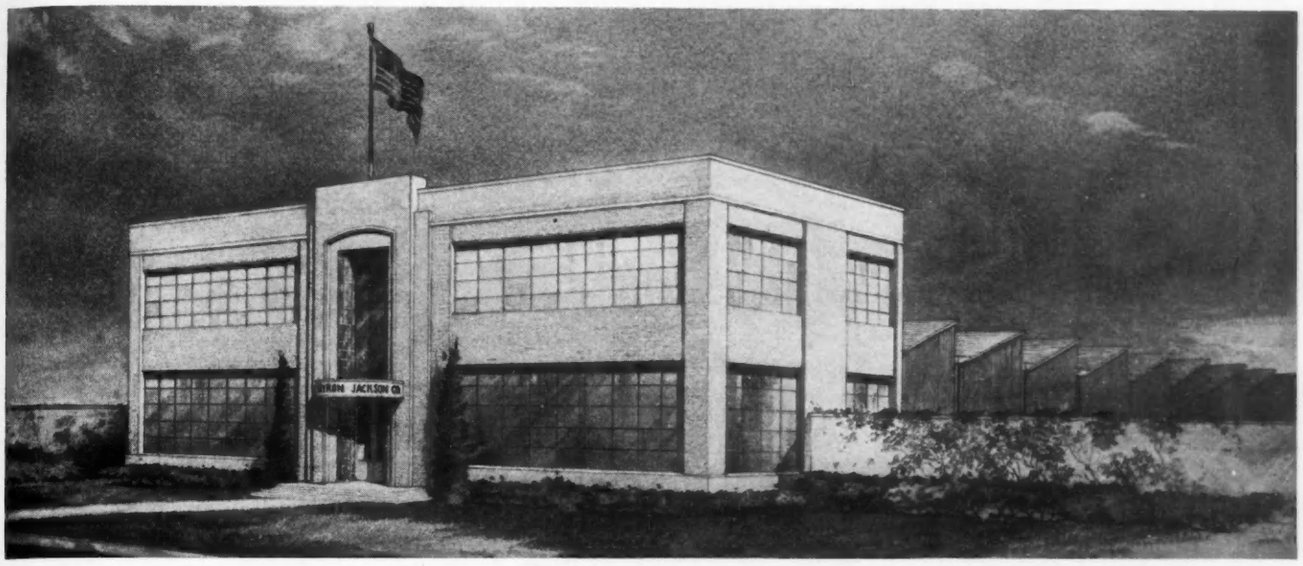


Houston Plant of Byron Jackson Company.

services of the company by oil operators in almost every field, the company will extend its operations to provide more comprehensive services in all fields of operations. Lane-Wells services now include gun perforating, electrical logging, oriented and magnetic survey services and magnetic survey instruments, packers and liner hangers, bridging plugs and dual-seal cementers.

Byron Jackson Company Opens Houston Plant

Both the oil tool division and the pump division of Byron Jackson Company is at home in its new office building, manufacturing plant and warehouse at 6247 Navigation Boulevard, (Mail Address, Drawer 2198) Houston. The office and warehouse, formerly at Fort Worth, has been discontinued.

The complete line of BJ Oil Tools previously maintained at Fort Worth will be stocked in Houston. The plant will be provided with equipment to manufacture certain items heretofore made in Los Angeles, and with complete facilities for the proper service and repairs of all BJ tools.

A modern heat-treating plant will assure accurate control of all heat-treating operations.

T. W. Jurling will be the Houston plant manager of the oil tool division, with E. R. Crawford serving as shop superintendent. H. E. Grau, chief engineer and works manager, will continue to supervise all engineering and plant operating activities. Jurling, for the past six years engineer and metallurgist at the Los Angeles plant, is a graduate of California Institute of Technology, where he also completed post graduate work in metallurgy.

E. W. UPTON

Crawford has a background of many years shop experience in the manufacturing of BJ tongs and elevators, including the proper servicing and repairing of these tools.

C. F. Vincent continues as Mid-Continent manager for the oil tool division, in charge of sales in the Gulf Coast and Mid-Continent areas. R. T. Todd, for several years sales representative in the Gulf Coast, will make his headquarters at the new Houston plant. Frank Champion, general sales manager for the oil tool division of Byron Jackson Company retains supervision of sales, and will spend a considerable portion of his time in the Gulf Coast and Mid-Continent, as in the past.

In addition to a staff of sales representatives, standard parts for Byron Jackson pumps will be available, and emergency service rendered. E. W. Upton, recently transferred to the Gulf Coast and Mid-Continent as district manager, will be in charge of all pump division activities.

A cordial invitation has been extended to all oil men to visit and inspect the new Houston plant.

Lincoln Foundation Contest Judges Find Huge Saving

The Jury of Award of the James F. Lincoln Arc Welding Foundation, Cleveland, Ohio, after judging thou-

T. W. JURLING **C. F. VINCENT** **E. R. CRAWFORD** **R. T. TODD**

sands of papers submitted in the $200,000 award program, reported that savings to industry by arc welding claimed by authors of papers aggregated $1,600,000,000. The jury's statement, released September 15, at the conclusion of its judging of papers, follows:

"The Central Committee of the Jury of Award of the James F. Lincoln Arc Welding Foundation finds that the savings to industry by arc welding claimed by authors of papers aggregates $1,600,000,000. This figure is arrived at after discounting some very enthusiastic claims. It is an amazing figure and undoubtedly would have been much greater had all of the authors estimated gross savings from the application of arc welding to their products."

Altogether, 382 awards were made by the foundation in the contest. The amounts ranged from $101.75 for honorable mention to $13,941.33 for the Grand Award.

A number of awards were presented to the oil industry, an account of which appeared on The Oil Weekly's "Men in the Industry's News" pages of the September 19, 1938, issue.

The Grand Award of the Foundation's Program went to Mr. and Mrs. A. E. Gibson, president and stockholder, respectively, of the Wellman Engineering Company, Cleveland, Ohio. The authors jointly received $13,941.33. Their paper is an outstanding treatise on all the elements required to assure the business and technical success of all users of welding throughout industry.

The Foundation's Award Program, which began 18 months ago, was judged by 31 engineering authorities from leading universities and colleges throughout the country, and has been hailed by leaders in science, education and industry as a valuable contribution to industrial progress in America.

A. PEREBINOSSOFF
North Texas district manager for Schlumberger Well Surveying Corporation

Schlumberger Transfers Perebinossoff to Dallas

Schlumberger Well Surveying Corporation, Houston, recently announced transfer of A. Perebinossoff from its engineering division in Houston to the branch in Dallas, Texas. In his new position Perebinossoff is district manager of the company's North Texas division.

South Louisiana

[*Continued from page 71*]

stem test of sands at 6133 to 6144 feet showed 360 feet of pipe line oil after the testing tool had slipped.

About 1220 feet south of the discovery well at Quarantine Bay, Plaquemines Parish, Gulf Oil Corporation recovered salt water again in State Quarantine Bay QQ 4, Section 17-19s-17e, last week and was preparing to make a squeeze job at 8975 feet. After perforating casing with 35 holes from 8994 to 9006 feet, a 20 minute drill stem test showed 7000 feet of salt water, no pressure and a fair blow. The test was made through quarter-inch chokes.

At Bayou Des Allemands field, St. Charles Parish, Amerada Petroleum Corporation and Louisiana Land & Exploration Company will probably open a new oil sand when St. Charles Land Company 2, Section 13-15s-20e, is completed. Last week casing was perforated from 8900 to 8920 feet, and on a drill stem test the well made 7 stands and 1 single of oil and mud. Tubing is being run for a production test. The well was drilled to 9295 feet in salt, topped at 9294 feet, and plugged back to 8999 feet.

Three New Wildcats

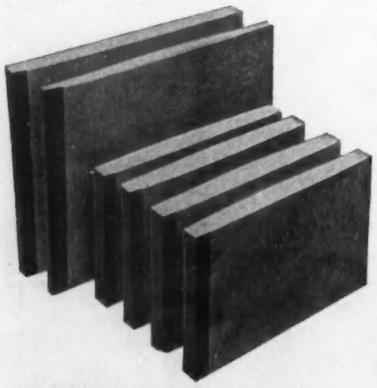
Acadia Parish has three new wildcats. Locations were announced at the end of the week for two wildcats northeast of Tepetate field. P. D. Freeman made location for Settig 2, 49 feet south of Settig 1 in Section 17-7s-1w. The well has spudded. In the same area Tri-Parish Drillers made location for Paul Stagg 1, 250 feet west and 60 feet south of the northeast corner of Section 4-7s-1w. In the Esterwood area, where Magnolia Petroleum Company drilled a deep dry hole, Western Gulf Oil Company made location for Homeseekers Development Company 1, 1786 feet north and 466 feet west of the southeast corner of Section 16-10s-1w.

Louisiana Crusader Oil Company is searching for a new oil sand at Lockport, Calcasieu Parish, in M. T. Erwin et al 1, Section 6-10s-9w. Last week the well was down to 8235 feet in water sand.

The Texas Company will attempt to open a new oil sand in State 24-B, 12s-9w, East Hackberry field, Cameron Parish. Casing has been perforated from 7903 to 7916 feet with 40 holes. A drill stem test is being made.

South of production at Villa Platte, Evangeline Parish, J. K. Hughes is reported to have abandoned Ortego 1 at 9166 feet after testing salt water. The well is reported to have logged oil sands from 9136 to 9156 feet.

At Jeanerette, St. Mary Parish, Herton Oil Company is attempting to open a new oil sand in Roanes Sugars 1-A, Section 38-13s-9e. A drill stem test from 10,466 to 10,480 feet showed gas and the perforations were squeezed. The operators are now perforating from 10,516 to 10,526 feet.



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Squeaks from the Bull Wheel

Ladies Note

"Why is it that you women always insist on having the last word?"

"We don't. The only reason we get it is that we always have a dozen arguments left when you stupid men are all run out."

A Nag, a Bone and Hunk of Hay

"How do you feel after your ride on that horse?"

"Gosh! I never thought anything filled with hay could be so hard!"

Baffling

She had spent a full hour instructing her third grade class in some of the wonders of nature, and just by way of a clincher she said: "Isn't it wonderful how little chickens got out of their shells?" One little eight year old lad, quite practical, quizzed back "What gets me is how they got in!"

Park Note

"I hear that the chief of police is going to try to stop necking."

"I should think he would—a man of his age!"

The Clan Again

"I wish to rent a horse."

"How long?"

"The longest you've got, there be five of us going."

Kind

"And did you know I am sending my daughter abroad to study singing?"

"No, I didn't, but it's very thoughtful of you."

Too Bad

Mary had a little lamb
'Twas awful dumb and so
It couldn't tell the red from green
Nor which was stop or go.
Followed her to school one day
A silly thing to do
Was caught between the red and green
And now it's mutton stew.

Seein' Stars

A high school girl, seated next to a famous astronomer at a dinner party, struck up a conversation with him by asking, "What do you do in life?"

He replied, "I study astronomy."

"Dear me," said the girl, "I finished astronomy last year."

Two-Thirty Plenty

Chinese patient (on telephone): "Doctor what time you fixee teeth for me?"

Doc: "Two-thirty—all right?"

Chinese: "Yes, tooth hurty, all right, but what time you fixee?"

Ministerial Tact

A minister was known by a few of his parishioners to be fond of Cherry Brandy and one of them in a mischievous frame of mind offered to present him with a bottle on condition, that it was fully acknowledged in the next issue of the Church Magazine. The offer was promptly accepted and in due course the notice appeared in the magazine: "The Vicar thanks Mr. McTavish for his gift of fruit and the spirit in which it was given."

Exception

"I can see good in all things."

"Can you see good in a fog?"

Ego

"What's that book you're reading, Bob?"

"What Twenty Million Women Want, Joe."

"Let me see it—I want to be sure my name's spelled right."

Makes It Clear

An Englishman was explaining to an American friend the disadvantage of the American telephone salute as compared with the British. "In America you say 'hello,' and the person you are speaking to says 'hello,' and that doesn't give you any information. In England you say, 'Are you there?' and the person at the other end of the line says 'yes' or 'no' as the case may be."

Genders and Ganders

How can you tell the gander from the goose?

Oh, we never bother about that. We just let them run together and work that out for themselves.

That Kind of a Dog

"What are you doing with all those cuspidors?"

"I'm taking them home for my dog."

"What kind of a dog have you?"

"Spitz."

Explained

"My shaving brush is very stiff. I wonder what's wrong with it?"

"I don't know. It was nice and soft when I painted the bird cage yesterday."

Misleading

"You acted wrongly in disobeying me, son. I am punishing you to impress it on your mind."

"Aren't you proceeding under a slight misapprehension as to the location of the mind, mother?"

Invited

He: "Will you have dinner with me tonight?"

She: "Why, certainly."

He: "Okay—tell your mother I'll be over early."

Unassisted

"Did your father help you with this problem, Willie?"

"No, I got it wrong by myself."

Overheard in Hollywood

Hear you are married again. Whom did you marry this time?

Er-r—I believe I've got his card in my bag somewhere.

Romeo Miz'n

Sam held her hand and she held siz'n,
And then they hugged and went to kiz'n.
They did not know her dad had riz'n,
Madder than hops and simply siz'n;
And really 'tiz'n right to liz'n,
But Sam got hiz'n and went out whiz'n.

MILLER
is always ahead

PERFORMANCE of MILLER Sand Pumps is a result of years of experience by oil men

SPEED of the MILLER in cleaning-out is a result of the powerful suction action.

ECONOMY is the reason why MILLER'S are in World-Wide use.

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The MILLER is made in diameters of 2½, 3, 3½, 4, 4¼, 5, 5½, 7 and 9 inches and lengths of 20, 25 and 30 feet. 5/32-inch wall thickness in REGULAR Type. ¼-inch wall tubes HEAVY Type Sand Pumps.

INTERCHANGEABLE BOTTOMS
To Meet Every Condition

● BAILER BOTTOM
With the Bailer Bottom installed the MILLER is quickly changed to a Bailer giving you a combination of either Bailer or a Sand Pump in one tool.

● SAND BOTTOM
Used when tools are run and when well is shot to quickly remove loose material.

● STAR BOTTOM
Used for cutting the sand loose.

● CHISEL BOTTOM
(In Pump)
With this bottom tightly packed sand can be easily broken in small pieces so it can be picked up in the pump.

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See Page 1445 COMPOSITE CATALOG

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